Co-funded by the Erasmus+ Programme of the European Union

EQAC "Establishment and Development of Quality Assurance Centers in Azerbaijan Universities"

586351-EPP-1-2017-1-AZ-EPPKA2-CBHE-JP

Final Report of Azerbaijan University of Architecture and Construction

on preparation of Pilot Program

1) **Name of the Pilot program: Restoration and reconstruction of the architectural monuments**

Total number of Bachelor students: 32

Name of pilot subjects:

1. Research methods
2. Heritage management
3. Typology of Azerbaijan architectural monuments
4. Seminar in conservation of cultural heritage
5. Diagnosis and treatment of material decay in historic structures
6. Theory of restoration and conservation
7. Legal and administrative aspects of conservation of historic environments
8. Historical structural systems and construction materials
9. Modern preservation technology

Number of pilot teachers: 2

Annex 1 – official documents for selection of pilot program, subjects and teachers

2) **Program commission**

When was it established? 12/10/2019

About the members:

Mammadova Z.G

Doctor of Philosophy (PhD) in architecture, professor, Honored Architect of Azerbaijan, Dean of the Architectural faculty of Azerbaijan University of Architecture and Construction (AzUAC)

Hajiyeva S.Kh.

Doctor of Science (ScD) in architecture, professor, Head of the department "Architectural constructions and restoration of the monuments", AzUAC

Muradov V.H.

Doctor of Philosophy (PhD) in architecture, professor of the department "Architectural constructions and restoration of the monuments", AzUAC

Axundova S.A.

Doctor of Philosophy (PhD) in architecture, associate professor of the department "Architectural constructions and restoration of the monuments", AzUAC

Samadov R.Y.

Doctor of Philosophy (PhD) in architecture, associate professor of the department "Architectural constructions and restoration of the monuments", head of the Master Education department, AzUAC

Annex 2. Official documents about the approval of program commission

3) Monitoring of Pilot teachers' teaching method

The goal of the monitoring: To identify
How many lessons observed? 3
Who were the observers?
Established committee board: **Mammadova Z.G, Hajiyeva S.Kh., Muradov V.H., Axundova S.A., Samadov R.Y..**

Results of the observation: During the monitoring strength and weaknesses of the program were identified. Some action points were planned to eliminate the weaknesses.
Annex 3: Report on monitoring

4) Trainings for teaching staff

Number of trainings organized: 3
Number of teachers participated: 30
Date of trainings: 26 November 2019
Results of the trainings: Teachers were aware of ESG standards and new teaching methods within pilot program
Annex 4: Approved Agenda of trainings (link to videos if possible) and report on training

5) Conducting survey among teaching staff

Number of participants: 50
Number of round tables organized with teachers: 1
Main findings from surveys: Some question which were given both to students and teachers were answered the same, for example both students and teachers mostly evaluate relationship between them as "very good". The tendency in similar answers in teachers questionnaires and business partners a little bit lower.
Annex 5: Report on survey of teaching staff

6) Trainings for students

Number of trainings organized: 5
Number of students participated: 60
Results of the trainings: Students got informed about fulfilling students' survey and pilot programs organized within EQAC
Annex 6: Report on student trainings

7) Survey among students

Number of students participated in surveys: 95
Main findings: In most cases, students rated the quality of a particular educational parameter good or excellent. But the statistic got for negative answers will be taken into account and the results will be compared to next surveys results to track changes after taken measures.
Annex 7: Report on student survey

8) Updated syllabus

Number of syllabus updated (the name of subjects): 9
Number of teachers prepared the syllabus: 2
Annex 8: Updated program
Annex 9: Updated syllabuses
Annex 10: Approved teaching methods and assignments

Annex 1 – official documents for selection of pilot program, subjects and teachers

Azərbaycan memarlıq və inşaat universiteti

Confirmed:
Rector
Prof.G.H.Mammadova

PILOT PROGRAMME
for "Establishment and Development of Quality Assurance Centers in Azerbaijan Universities" (EQAC)
Erasmus+ CBHE Project

PILOT PROQRAM
"Azərbaycan universitetlərində keyfiyyətə nəzarət mərkəzlərinin yaradılması və inkişafı" adlı
Erasmus + CBHE layihəsi çərçivəsində

In English
Pilot specialty: Restoration and reconstruction of the architectural monuments

№	PILOT SUBJECTS
1	Research methods
2	Heritage management
3	Typology of Azerbaijan architectural monuments
4	Seminar in conservation of cultural heritage
5	Diagnosis and treatment of material decay in historic structures
6	Theory of restoration and conservation
7	legal and administrative aspects of conservation of historic environments
8	Historical structural systems and construction materials
9	Modern preservation technology

Azərbaycan dilində
Pilot ixtisas: Memarlıq abidələrinin bərpası və yenidən qurulması

№	PİLOT FƏNLƏR
1	Tədqiqat metodları
2	Memarlıq irsinin idarə olunması
3	Azərbaycan memarlıq abidələrin tipologiyası
4	Memarlıq abidələrinin bərpa layihələndirilməsi
5	Memarlıq abidələrinin diaqnostikası və mühəndis reabilitasiyası
6	Müasir bərpa nəzəriyyəsi və təcrübəsi
7	Azərbaycanda abidələrin qorunma sahəsində qanunlar və idarəetmə aspektləri
8	Tarixi konstruktiv sxemlər və inşaat materialları
9	Müasir bərpa texnologiyası

Strateji inkişaf üzrə prorektor S. Hacıyeva

Annex 2. Official documents about the approval of program commission

Azərbaycan memarlıq və inşaat universiteti

Confirmed:
Rector
Prof.G.H.Mammadova

PILOT PROGRAMME COMMISSION
for "Establishment and Development of Quality Assurance Centers in Azerbaijan Universities" (EQAC)
Erasmus + CBHE Project

PİLOT PROQRAM KOMİSSİYASI
"Azərbaycan universitetlərində keyfiyyətə nəzarət mərkəzlərinin yaradılması və inkişafı" adlı Erasmus + CBHE layihəsi çərçivəsində

In English
Pilot specialty: Restoration and reconstruction of the architectural monuments

	COMISSION MEMBERS
1	**Mammadova Z.G** Doctor of Philosophy (PhD) in architecture, professor, Honored Architect of Azerbaijan, Dean of the Architectural faculty of Azerbaijan University of Architecture and Construction (AzUAC)
2	**Hajiyeva S.Kh.** Doctor of Science (ScD) in architecture, professor, Head of the department "Architectural constructions and restoration of the monuments", AzUAC
3	**Muradov V.H.** Doctor of Philosophy (PhD) in architecture, professor of the department "Architectural constructions and restoration of the monuments", AzUAC
4	**Axundova S.A.** Doctor of Philosophy (PhD) in architecture, associate professor of the department "Architectural constructions and restoration of the monuments", AzUAC
5	**Samadov R.Y.** Doctor of Philosophy (PhD) in architecture, associate professor of the department "Architectural constructions and restoration of the monuments", head of the Master Education department, AzUAC

Azərbaycan dilində
Pilot ixtisas: Memarlıq abidələrinin bərpası və yenidən qurulması

	KOMISSIYA ÜZVLƏRI
1	**Muradov V.H.** Memarlıq üzrə fəlsəfə doktoru, AzMİU-nun "Memarlıq konstruksiyaları və abidələrin bərpası" kafedrasının professoru
2	**Axundova S.Ə.** Memarlıq üzrə fəlsəfə doktoru, AzMİU-nun "Memarlıq konstruksiyaları və abidələrin bərpası" kafedrasının dosenti
3	**Səmədov R.Y.** Memarlıq üzrə fəlsəfə doktoru, AzMİU-nun Magistratura şöbəsinin müdiri və "Memarlıq konstruksiyaları və abidələrin bərpası" kafedrasının dosenti
4	**İbrahimovİ.**, «Azərkurortlayihə» İnstitutunun direktoru
5	**Hüseynzadə C.** Memarlıq fakültəsinin tələbəsi

Strateji inkişaf üzrə prorektor

Azərbaycan memarlıq və inşaat universiteti

Confirmed:
Rector
Prof.G.H.Mammadova
«__05__» ____11____2019

Responsibilities of the Commission board

The commission board for and planning necessary activities for the specialty improvement is consisted of six members: chair, three academic stuff, student, and business partner.

The following will describe the responsibilities of the persons mentioned above.

Chair- the board chair is responsible for leading the board. The position demands leadership qualities, and personal integrity. The responsibilities of the chair is to Serve as the contact person for every board member on board issues, organize and lead meetings, ensure that all board members are involved in committee activities; create agenda and necessary document forms, plan further actions for goal achievement. Periodically review the strategic plans and review whether goals are being met.

Academic staff members– Establish the Mission and Purpose for other academic staff of the specialty. Review the performance of the academic staff on an annual basis. Board members may be asked to prepare an annual performance review and present it to the full board. They keep up to date on competitors and developments in the specialty field. The members should share the necessary information with other colleagues, inspiring them to become involved.

Student helps share ideas, interests, and concerns of faculty students with other members of the board. Helps raise student awareness about specialty new features and opportunities, including support in organization of social events, community projects, etc.

Business representative - Actively participates in full Board meetings, always prepared for board meetings by staying informed about Board matters and reviewing materials sent in advance of the meeting. Acts as an Ambassador of the Board when participating in business networking functions and community events. Helps identify needs and attributes of graduates to find job after graduation easily. Support academic staff board members to modify the specialty program to achieve best results and high rate of graduates' employability.

To all committee members:

Board members should accept their positions with full understanding that being a board member requires a time commitment. A board member should review the meeting schedules to make sure that he doesn't have any conflicts. After reviewing materials, he should ask questions about the upcoming agenda so that he can be an informed contributor to the meeting. Board members should take the responsibility for accepting tasks and follow through on given assignments.

Sattarova U.E. [illegible]

[illegible]

Co-funded by the Erasmus+ Programme of the European Union

Azərbaycan Memarlıq və İnşaat Universiteti

Ə m r № 300/6-m

Bakı səhəri «12» 10 **2019-cu il**

Layihə çərçivəsində komissiyanın təşkili

"Azərbaycan universitetlərində keyfiyyətə nəzarət mərkəzlərinin yaradılması və inkişafı" adlı Erasmus+ layihəsi çərçivəsində Memarlıq fakültəsində Pilot proqram ilə bağlı "Memarlıq abidələrinin bərpası və yenidən qurulması" ixtisası üzrə tədris olunan fənlərə monitorinqlər təşkil olunması nəzərdə tutulmuşdur. Bununla əlaqədar,

ƏMR EDİRƏM.

1. Memarlıq fakültəsində "Memarlıq abidələrinin bərpası və yenidən qurulması" ixtisası Pilot proqram əsasında tədris olunsun.
2. Pilot proqram çərçivəsində sözü gedən ixtisas üzrə fənlərin tədrisi üçün aşağıdakı müəllimlər təyin olunsun.
   - Məmmədova Z.G.
   - Hacıyeva S.X.
3. Fənlərin davamlı monitorinqi və düzgün qiymətləndirilməsi məqsədi ilə komissiya yaradılsın və aşağıdakı tərkibdən ibarət olsun.

1. Səttarova Ü.E. – sədr, Strateji inkişaf üzrə prorektor
2. Muradov V.H.- üzv, Memarlıq konstruksiyaları və abidələrin bərpası" kafedrasının professoru
3. Axundova S.Ə. – üzv, Memarlıq konstruksiyaları və abidələrin bərpası" kafedrasının dosenti

ƏSLİ İLƏ DÜZDÜR
Dəftərxana müdiri
Azərbaycan Memarlıq və İnşaat Universiteti

4. Səmədov R.Y.- üzv, Memarlıq konstruksiyaları və abidələrin bərpası" kafedrasının dosenti
5. İbrahimov İ. - üzv ,«Azərkurortlayihə» İnstitutunun direktoru
6. Hüseynzadə C. – üzv, Memarlıq fakültəsinin tələbəsi

Əsas: "Azərbaycan universitetlərində keyfiyyətə nəzarət mərkəzlərinin yaradılması və inkişafı" adlı Erasmus+ layihəsi

Rektor **prof. G.H. Məmmədova**

Əmri hazırladı:

Strateji planlaşdırma şöbəsinin müdiri

_____ **Türkan Əliyeva**

Razılaşdırılıb:

Tədris işləri üzrə prorektor

_____ **A. Qasımov**

Strateji inkişaf üzrə prorektor

_____ **Ü.E.Səttarova**

Kadrlar şöbəsinin müdiri

_____ **E.A.Budaqova**

ƏSLİ İLƏ DÜZDİR
Azərbaycan Memarlıq

Göndərilir: *Strateji inkişaf üzrə prorektor, kadrlar şöbəsi, memarlıq fakültəsi, strateji planlaşdırma şöbəsi, Memarlıq konstruksiyaları və abidələrin bərpası kafedrasıkkk dəftərxana.*

Annex 3: Report on monitoring

Azərbaycan Memarlıq və İnşaat Universiteti

Confirmed:
Rector
Prof.G.H.Mammadova
«__08__» ____11____ 2019

Monitoring Report

After monitoring process, the committee board has agreed further points:

Model-making workshops would be useful facilities for students so they can experiment with various model-making techniques to make 3D maquettes of their work at various scales and at various points in their design project. I am aware that there is a proposal to develop a model-making workshop for students. In addition, it would be useful to have more student work evident throughout the School.

In its pedagogy, the course does not allow some of architectural approaches to practice. At present, it requires students to undertake strategic data mapping instead of a comprehensive social, cultural, and spatial engagement with the city of Baku.

Range of practice methods, both professional and pedagogic is presented at high level.

The board believes that the process itself will help it to modernise architectural education.

All members of the board consider the marking system at the faculty including study at the specialty as very effective. Teachers from the various groups cross-check marking within each language group, but not across different languages. Many teachers speak and teach in all 3 languages so the marking process is quite transparent.

Students' representative spoke of: their reasons for choosing to study architecture; their reasons for choosing the Azerbaijan University of Architecture and Constructions; their ambitions and motivation; their sources of inspiration; their views about the programme structure and content; the University's resources; assessment and feedback; and ideas about how their education might be improved. The following represents the main points made.

At present, the majority of students work at home, although the Faculty is addressing this. Students commented that workshop space in particular is needed, although some are able to make models at home. They believe that being able to work at school would enable them to enlist the help of specialist teachers. More locker space would be useful, as it would enable students to store their work. Provision of wifi would encourage more students to work in the Faculty and would help them with their research. The Library is a popular resource and offers internet access.

During monitoring all board members agreed that masterclasses with practising architects are important. Students would benefit from more engagement in and with professional practice and practitioners in the course of their academic studies.

For better understanding of present situation of specialty program progress special form was created for head of the specialty leading department and its academic staff.

Annex 4: Approved Agenda of trainings (link to videos if possible) and report on training

Azərbaycan memarlıq və inşaat universiteti

Agenda of trainings for teaching staff

DAY	Name of training
31/01/2020	• ESG standards and their role in quality assurance • New teaching methods (PBL)
12/02/2020	• The Role of Preparation of Learning Outcomes in Student-oriented Education • Bloom's Taxonomy • Analyses of the survey results •
19/02/2020	• Research and analytical analysis • Rules for the analysis of articles • Rules for writing projects (course work)

Agenda of trainings for students

DAY	Name of training
17/02/2020	• The role of students in quality assurance
19/02/2020	• Introduction of new teaching methods • New assessment rules
20/02/2020	• The importance of participation in surveys • Rules for writing projects (course work)

Rector **prof. G.H. Mammadova**

Azərbaycan memarlıq və inşaat universiteti

Report on trainings for teaching staff of AzUAC

- **31/01/2020.** On this day two trainings were held for teaching staff of AzUAC at university. The first training was dedicated to the "ESG standards and their role in quality assurance". 25 teachers from different faculties attended the workshop. Mainly, teachers from the faculties of Architecture, Water management and engineering communication systems, Construction-economy and etc. The main aim was to explain that the ESG aim is to clarify the organization of quality assurance and lay down the standards and guidelines for internal and external quality assurance within higher education institutions. The result is that the university should develop and implement a strategy for the continuous enhancement of quality. The strategy, policy and procedures should have a formal status and be publicly available. They should also include a role for students and other stakeholders. The university should have formal mechanisms for the approval, periodic review and monitoring of their programmes and awards.

  The second training was dedicated to the applying of new teaching methods in teaching. In this case the "Problem-based learning (PBL) method" was discussed. Generally, about 30 teachers were participated from different faculties and departments such as Architecture, Construction, Construction-economy, Mechanics and Information technologies, Transportation, Foreign languages department etc. The video about PBL method was showed to participants. After it the participants asked the questions and the training continued with the interesting discussion.
- **12/02/2020.** 3 trainings were held at university for teaching staff. The first one was "The Role of preparation of learning outcomes in student-oriented education". 21 teachers were participated in the training. Learning outcomes describe the measurable skills, abilities, knowledge or values that students should be able to demonstrate as a result of a completing a course. Why learning outcomes? How learning outcomes need to be? and other questions were discussed in the workshop.

  Another workshop named "Bloom taxonomy" was held for 24 teachers from Construction-economy faculty and mainly from Foreign languages department. Head of Strategy planning department Turkan Aliyeva conducted the workshop

with the presentation. Teachers were aware of how to write learning outcomes and how Bloom's taxonomy can aid in active learning.

The next training named "Analysis of the survey results" was held for 20 teachers from different faculties such as Architecture, Construction-technology, Construction-economy and etc. Fifty teachers were questioned about the current situation in the University. Academic staff presented answers for statistical evaluation and gave valuable feedbacks on university improvement and problems solution ideas and suggestions. The teachers were informed about key points and shortages were discussed.

- **19/02/2020.** "Research and analytical analyses" training was held for 22 teachers from different faculties. The definition of analyses and other important issues were discussed among the teaching staff.

  Another training named "Rules for the analysis of articles" was conducted at university. 20 teachers attended the training from Construction, Water management and engineering communication systems, Construction-economy faculties. Teachers were explained how to analyze an article. In analyzing an article, the author is based on three main points as a writer. Other main steps and rules were informed as well.

  The last training which was held on this day was dedicated to the "Rules for writing projects (course work)". 23 teachers were participated in the workshop. They were explained about the rules which they should highlight and require from students.

Annex 5: Report on survey of teaching staff

Report on survey of teaching staff

Fifty teachers were questioned about the current situation in the University. Academic staff presented answers for statistical evaluation and gave valuable feedbacks on University improvement and problems solution ideas and suggestions.

One of the positive points is that some questions which were given both to students and teachers were answered the same, for example both students and teachers mostly evaluate relationship between them as “very good”. The tendency in similar answers in teachers’ questionnaires and business partners is a little bit lower.

It was expectedly for quality assurance centre to get the most commonly reported problems were training sessions “providing personal and professional support to students in the learning process” and “giving instructions to teacher in teaching activities” as it was discussed in training and seminar sessions.

The big number of teachers chose passive ways of improvement as participation in seminars and trainings. In the questionnaire teachers were offered to choose their strengths (8 strengths were suggested). It is worth to note that the people who chose more strength therefore choose more practical and active ways of their carrier improvement.

The checklist to measure the teacher's innovativeness, preparedness, and effectiveness in delivering the subject matter covered essential questions about the method used during the lessons. More than 50% of teachers are using traditional methods as lecture, demonstration of attributes of the taught subject, practical tasks, discussions, (also known as seminars) and group work and projects were choosen.

According to the result of questionnaires and yearly syllabuses inspection there is a great improvement of the content of subjects taught. Syllabuses are updated with related publications and teaching materials. But not all subjects updated literature is available in the library.

Annex 6: Report on student trainings

Azərbaycan memarlıq və inşaat universiteti

Report on student trainings

- **17/02/2020.** On 17th of February the training dedicated to "The role of students in quality assurance" topic was held at AzUAC. Nearly 50 students from different specialties and faculties attended the training. These students are studying in the faculties of Architecture, Construction-economy, Mechanics and Information technologies etc. In recent years, the role of students in the quality assurance of higher education has become recognized, across Europe, as being both necessary and desirable. Students have increasingly become involved in the improvement and enhancement of their own learning experiences. The topic about how the Bologna Process has put increasing emphasis on the importance of the involvement of students in the quality assurance of higher education was discussed. At the same time, the main aims of the university, role of students in the academic community and student involvement at the university level were discussed.

- **19/02/2020. "**Introduction of new teaching methods" training was held for students at university. 60 students from the faculties of Architecture, Water management and engineering communication systems, Construction-economy, Transportation faculties participated in the training. The presentation was shown. The main points like key studies, no traditional lectures, Problem-based learning (PBL) method, Student-centered learning (SCL) method were explained to students in details. After the conclusion of the presentation, students joined in discussion of the topic.

  The second training dedicated to the "New assessment rules" topic. Approximately 60 students from different specialties participated in the training. Students were informed about the types of assessments and new rules to be applied in university.

- **20/02/2020.** The training named "The importance of participation in surveys" was conducted for 55 students at AzUAC. Participants were informed that in general 95 students took part in completing the survey. It also was noted that students' participation is critical to survey success. The comments about

encouragement of students to fill the surveys were given. The significance of the graduate feedback to the quality of education was also explained.

Another training “Rules for writing projects (course work)” was held at university for 48 students from different specialties. Participants were informed about the tips for good writing. Also, guidelines and steps for writing a course work were explained.

Annex 7: Report on student survey

Report on student survey

95 students from different faculties of the Azerbaijan University of Architecture and Construction passed the questionnaire online. Students from more than 20 specialties took part in the poll. The percentage of men and women was almost the same 47/53.

The template contained significant questions regarding to the overall teaching-learning process and its strategy.

It is need to be noted that in most cases, students rated the quality of a particular educational parameter good or excellent. Nevertheless, some issues got rather low marks. For example, 17% rated such items as “The time allotted for a particular subject is sufficient to complete all tasks, read the literature on the subject, and prepare for the exam” and “Learning methods, as well as tasks, help to understand the content of the subject, but also to actively participate in the lessons and to learn the subject independently” as bad or very bad. Despite the fact that the results obtained are absolutely not critical, in connection with this, some action points will be held. During the next trainings for teachers it will be explained how important is to dedicate the first lessons explaining the objectives of the subject, give accurate instructions on what it is expected from students and necessary support will be provided to teachers in order to develop their study programmes and quality of teaching in general.

The results got in this survey will help the educators develop new teaching strategies and meet up ESG standards.

Annex 9: Updated syllabuses

MINISTRY OF EDUCATION OF AZERBAIJAN REPUBLIC

AZERBAIJAN UNIVERSITY OF ARCHITECTURE AND CONSTRUCTION

Approved:

Head of the department T.A. Abdullayev

"14" September 2015.

Syllabus

Department "Architectural constructions and restoration of the monuments"

Discipline « Diagnosis and treatment of material decay in historic structures»

1. Information on discipline

Code MİF -B04A

Year of education **I** semester **II**

Faculty **Architectural**

Group

Load: lectures **30** hours, individual work **90** hours . Total **120** hours.

Credits: **4**

Room: № _____

Time: _____

2. Information on lecturer:

Name and title: **Akhundova S.A.., PhD in architecture, ass. professor**

Address of the department: **AzUAC, III building, 2 floor**

Consultation hours: _____

E-mail:

Department: **5387409**

3. Necessary books and manuals:

1. **С.С.Подъяпольский, Г.Б.Бессонов, Л.А.Беляев** и другие. Реставрация памятников архитектуры. Москва, 1988.
2. **Prof. Dr. Ramiz Abdülrahimov** Restorasyonda yapım teknikleri. – Trabzon, 1999.
3. **Д.А.Ахундов** – Архитектура древнего и раннесредневекового Азербайджана. Баку, 1986.
4. **Г.Г.Мамедова** – Культовое зодчество Кавказской Албании. Баку, 1997.
5. **В.И.Керимов** – Оборонительные сооружения Азербайджана. Баку, 1998.
6. **Э.М. Гендель** - Инженерные работы при реставрации памятников архитектуры. Москва, Стройиздат, 1980.
7. Методика реставрации памятников архитектуры Пособие для архитекторов – реставраторов. Москва, 1961.

4. Description and the goals of the discipline:

PURPOSE OF THE COURSE
Protection of historical and architectural monuments is one of the main tasks of the engineering conservation. Engineering conservation is a discipline that requires a lot of scientific knowledge in the field of not only study of architectural monuments abut as well of the techniques to be used for their preservation.
COURSE OBJECTION – to explain the process through which the material, historical, and design integrity of humanity's built heritage; how to prolonged its life through carefully planned interventions. Decisions of when and how to engage in an intervention are critical to the ultimate conservation of the immovable object.

3. ROLE OF THE COURSE IN THE TRAINING OF STUDENTS

The objectives of the course is to familiarize students with the history of the ancient architecture of Azerbaijan, which is the first step in teaching students the history of architecture. Here, the role of monuments in public life in modern man world view, including the building as an architectural monument from the action program have been accepted widely perceived as an objective and scientific basis for recovery on the connection between imagination. That is why the importance of this course is increase, acquaintance with it paves the way for further study of the history of architecture of Azerbaijan in subsequent periods. In addition, interaction of Azerbaijan architecture and architecture of other countries in the region take the place during the course, as well as the place of architecture of Azerbaijan studied in the development of architecture in the region. This creates a good base for exploring the architecture of Azerbaijan in the global context.

5. The planned schedule of the subject:

5.1. Topics and summary of lectures

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4
1-2	**THEME 1. UNFAVORABLE FACTORS, INFLUENCED AT ARCHITECURAL MONUMENTS CONDITIONS**	**4 HOURS**	

	Incorrect exploitation and late repair. Human activity, fires and military activity Neglecting of actual stress distribution and irregularity of foundation bedding humidity Irregular precipitation. Location of the water basin near to the monument and site relief Vibration in the cases of seismic load, in the cases of passing nearby traces of heavy trucks and trains		
3-4	**THEME 2. REASONS AND TYPES OF DESTRUCTIONS IN ARCHITECTURAL MONUMENTS** The complex of unfavorable factors affecting the condition of monuments Engineering- geological investigations and their role in architectural monuments' preservation Modern methods of foundation beddings artificial strengthening in architectural monuments Peculiarities of deformation of buildings. Location of the water basin near to the monument and site relief Strengthening of foundations and other systems	**4 HOURS**	
5-6	**THEME 3. ENGINEERING- GEOLOGICAL INVESTIGATIONS AND THEIR ROLE IN ARCHITECTURAL MONUMENTS' PRESERVATION** Modern methods of foundation beddings artificial strengthening in architectural monuments: Bedding cementation; Silicatisation of soils (beddings), Electrical drainage and electrochemical consolidation of soils	**4 HOURS**	
7-8	**THEME 4. STRENGTHENING OF FOUNDATIONS AND BEDDINGS** Foundation pipe. Optimal conditions for this method. Strengthening of foundations by the mean of shoulder. Pile and mixed ways of foundations' strengthening. Usage of drill-injection piles	**4 HOURS**	
9-10	**THEME 5. STRENGTHENING THE ELEMENTS OF THRUST SYSTEMS.** -Strengthening the support contour of a vault. - Strengthening of arches (vaults), deformed at the displacement of supports and overload. - Unloading of deformed arches(vaults) - Strengthened in the case of the structural collapse of vaults	**4 HOURS**	

11-12	**THEME 6. WAYS OF CUPOLA (DOME) CONSOLIDATION** Condition of arches and vaults. The reasons of horizontal motion of the supports. Internal reasons of arches and vaults demolitions in the case of suitable stability. The destruction of vaults	**4 HOURS**	
13-14	THEME 7. **ASSESSING CLEANING AND WATER-REPELLENT TREATMENTS FOR HISTORIC MASONRY BUILDINGS** Understanding the Building Materials Cleaning Methods and Materials Planning a Cleaning Project Water-Repellent Coatings and Waterproof Coatings Summary and References	**2 HOURS**	
15	**THEME 8. OTHER QUESTIONS IN PRESERVATION** Improving Energy Efficiency in Historic Buildings. Historic Interiors That Should Not Be Cleaned Abrasively. Rehabilitating Interiors in Historic Buildings: Identifying and Preserving Character-Defining Elements. Preserving Historic Ornamental Plaster. Heating, Ventilating, and Cooling Historic Buildings—Problems and Recommended Approaches	**4 HOURS**	

5.2. Topics of essay

Student should draw series of bdrawings dedicated to the streigening of different parts or different cases of building demolition.

6. Requirements for attendance.

The maximum number of points for attendance is 10 points. In the case of students' attending all classes during the semester, he gets 10 points. Every 10 % of the total number of missed classes result in the loss of 1 point. In the case of exceeding the allowable limit of missed classes the student is not allowed to attend the exam. Special desicion should be decided on his further fate.

7. Assessment of student knowledge

The maximum number of points for knowledge is 100. 50 of them student gaining during the semester, 50 - on the exam. Scored during the semester 50 points included: 10 points per visiting, 10 points for additional work, 30 points for the results of laboratory classes or seminars. If the discipline has course work (project), then 20 points are awarded for the results of seminar or laboratory studies and 10 - for the implementation of the course work (project).

During the examination student must score at least 17 points. In the case of more than 30% of missed classes, the student is not allowed to exam.

According to the European Credit System for the results of points accumulated for the semester, the student is evaluated as follows:

Less than 51 points	–	«non satisfactory»	– F
51 - 60 points	–	«acceptably»	– E
61 - 70 points	–	"satisfactory"	– D
71 - 80 points	–	«good»	– C
81 - 90 points	–	"very good"	– B
91 - 100 points	–	"best"	– A

8. Violation of the rules of conduct. In case of violation by the student the code of conduct provided by the University it can be applied activities under the Regulations

9. Requirements for the level of the course content familiarization:

At the end of the course the student should:

• know the history of architecture of ancient Azerbaijan and formation of the restoration and architectural science, to be familiar with the basic stages of development of the architecture of Azerbaijan;

• have a clear idea of the new scientific discipline

10. Study the opinion of students about the subject

After completing the course we will interview the students for clarifying their relation to the subject, separate topics, complexity of the individual works
etc._____
_____
_____
_____
_____

Lecturer: S.A.Akhundova ( )

"_____"_____ 20__ .

Co-funded by the Erasmus+ Programme of the European Union

Master

MINISTRY OF EDUCATION OF AZERBAIJAN REPUBLIC

AZERBAIJANUNIVERSITY OF ARCHITECTURE AND CONSTRUCTION

Approved:

Head of the department S.Kh.HAJIYEVA

"13" September2019.

Syllabus

Department "Architectural constructions and restoration of the monuments"

Discipline «Research methods»

1. Information on discipline

Code MİF-B02

Year of education **I** semester **I**

Faculty **Architectural**

Group

Load: lectures **30** hours, individual work 45 hours Total **60** hours.

Credits: **2**

Room: № _____

Time: _____

2. Information on lecturer:

Name and title: **HAJIYEVA S.Kh, ScD in architecture, ass.professor**

Address of the department: **AzUAC,III building, 2 floor**

Consultation hourss: _____

E-mail:

Department: **5387409**

3. Necessary books and manuals:

1. Nicholas Walliman (2000) Research methods. The basics. ISBN 0-203-83607-3 Master e-book ISBN
2. Blaxter, L., Hughes, C. and Tight, M. (2006) *How to Research* (third edition).Buckingham: Open University Press.
3. Brink-Budgen, R. (2009) *Critical Thinking for Students: Learn the Skills of Critical Assessment and Effective Argument* (fourth edition). Oxford: How To Books\
4. David, M. and Sutton, C. (2004) *Social Research: The Basics*. London: Sage. Fisher, A. (1998) *The Logic of Real Arguments.* Cambridge: CambridgeUniversity Press.
5. Flick, U. (2009) *An Introduction to Qualitative Research* (fourth edition).London: Sage.\
6. Holliday, A. (2007) *Doing and Writing Qualitative Research* (second edition).London: Sage.
7. Hoy, W. (2009) *Quantitative Research in Education: A Primer.* London: Sage.
8. Leedy, P. D. and Ormrod, J. (2009) *Practical Research: Planning and Design* (ninth edition). Harlow: Pearson.
9. Monippally, P. and Shankar, B. (2010) *Academic Writing: Guide for Management Students and Researchers*. Delhi: Sage.
10. Okasha, S. (2002) *Philosophy of Science: A Very Short Introduction*. Oxford: Oxford University Press.
11. Oliver, P. (2003) *The Student's Guide to Research Ethics*. Maidenhead: Open University Press.

4. Description and the goals of the discipline:

Research is a very general term for an activity that involves findingout, in a more or less systematic way, things you did not know. Amore academic interpretation is that research involves finding outabout things that no-one else knew either. It is about advancing thefrontiers of knowledge.Research methods are the techniques you use to do research. Theyrepresent the tools of the trade, and provide you with ways to collect,sort and analyse information so that you can come to some conclusions.If you use the right sort of methods for your particular type ofresearch, then you should be able to convince other people that yourconclusions have some **validity**, and that the new knowledge youhave created is soundly based.

PURPOSE OF THE COURSE «Research methods»is to introduce to the studentsl the main aspects of research methods in the very beginning of their activity as research makers, to explain the different ways of research, which is the main part not only of masters' educational process but ofscientific investigation in general.

The course includes three parts:
PART I. RESEARCH THEORY AND PRACTICE
PART II. THE MAIN RESEARCH METHODS
PART III. RESEARCH METHODOLOGIES IN ARCHITECTURE

OBJECTIVES OF THE COURSE:
To familiarize students with the basic provisions of this scientific discipline; to explore the methodological problems of science and modern aspects of science in the creation .Science as a special branch of rational human activity for the production of objectively true knowledge about the world around us arises as a natural

continuation of the ordinary, spontaneous and empirical process of cognition. In addition to scientific knowledge, there are also extra-scientific methods of understanding reality, the most important of which is art, and the most familiar is ordinary knowledge. Therefore, our first task is to find out what is their similarity and continuity and what is the qualitative difference between scientific forms of cognition and unscientific.

REQUIREMENTS TO THE COURSE PERCEPTION:

- Understanding of the research theory and practice
- Familiarizing with research basics
- Knowledge on the research theory
- Ability to structuring the research project
- Understanding the research ethics
- Finding and reviewing the literature
- Knowledge on the main research methods
- Understanding the nature of data
- Collecting and analysing secondary data
- Collecting primary data
- Ability to realize the quantitative data analysis
- Ability to realize the Qualitative data analysis
- Writing the proposal and writing up the research
- Research methodologies in architecture
- Familiarizing with types of research
- Understanding the esearch process
- Ability in researching and data collection
- Ability to report writing

SECTIONS OF THE COURSE

The course consists of one section which consists of **lectures** (30 hours).
Student must demonstrate the acquired knowledge by presenting a research dedicated to the topic of the master dissertation (or part of the dissertation) in order to receive his monthly assessment. One topic should be chosen by student and developed during semester.
To get extra points for extracurricular activities (free works), the student can submit an essay on one of the proposed topics.

5. The planned schedule of the subject:

5.1. Topics and summary of lectures

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4
1	**PART I. RESEARCH THEORY AND PRACTICE LECTURE 1.Research basics**	**2hours**	
2	**LECTURE 2. Research theory**	**2hours**	
3	**LECTURE 3. Structuring the research project**	**2hourss**	
4	**LECTURE 4. Research ethics**	**2hours**	
5	**LECTURE 5. Finding and reviewing the literature**	**2hours**	

6	**PART II THE MAIN RESEARCH METHODS** **LECTURE 6.The nature of data**	**2hours**	
7	**LECTURE 7. Collecting and analysing secondary data Collecting primary data**	**2hours**	
8	**LECTURE 8. Quantitative data analysis**	**2hours**	
9	**LECTURE 9. Qualitative data analysis**	**2hours**	
10	**LECTURE 10. Writing the proposal and writing up the research**	**2 hours**	
11	**PART III. RESEARCH METHODOLOGIES IN ARCHITECTURE** **LECTURE 11. Types of research**	**2 hours**	
12	**LECTURE 12Research process**	**2 hours**	
13	**LECTURE 13. Researching and data collection**	**2 hours**	
14	**LECTURE 14.Report writing**	**2 hours**	
15	**LECTURE 15. Case studies**	**2 hours**	
	TOTAL	**30HOURs**	

5.2. Topics of essay

Number	TOPICS
1.	Ancient Roman architectural monument
2.	Ancient Greek architectural monument
3.	Medieval Azerbajinian architectural monument- Shirvanshakhs' Palace
4.	Medieval Azerbajinian Order sistem
5.	Gothic churches of France
6.	Villa Rotunda by Palladio
7.	Constructivism in Baku
8.	Frank Loyd Wright's creativity
9.	Lui Sullivan's creativity
10.	Restoration of the monument in Azerbaijan

6. Requirements for attendance.

The maximum number of points for attendance is 10 points. In the case of students' attending all classes during the semester, he gets 10 points. Every 10 % of the total number of missed classes result in the loss of 1 point. In the case of exceeding the allowable limit of missed classes the student is not allowed to attend the exam. Special desicion should be decided on his further fate.

7. Assessment of student knowledge

The maximum number of points for knowledge is 100. 50 of them student gaining during the semester, 50 - on the exam. Scored during the semester 50 points included: 10 points per visiting, 10 points for additional work, 30 points for the results of laboratory classes or seminars. If the discipline has course work (project), then 20 points are awarded for the results of seminar or laboratory studies and 10 - for the implementation of the course work (project).

During the examination student must score at least 17 points. In the case of more than 25% of missed classes, the student is not allowed to exam.

According to the European Credit System for the results of points accumulated for the semester, the student is evaluated as follows:

Less than 51 points	–	«non satisfactory»	– F
51 - 60 points	–	«acceptably»	– E
61 - 70 points	–	"satisfactory"	– D
71 - 80 points	–	«good»	– C
81 - 90 points	–	"very good"	– B
91 - 100 points	–	"best"	– A

8. Violation of the rules of conduct. In case of violation by the student the code of conduct provided by the University it can be applied activities under the Regulations

9. Requirements for the level of the course content familiarization:

At the end of the course the student should:

• know the history of architecture of ancient Azerbaijan and formation of the restoration and architectural science, to be familiar with the basic stages of development of the architecture of Azerbaijan;

• have a clear idea of the new scientific discipline

10. Study the opinion of students about the subject

After completing the course we will interview the students for clarifying their relation to the subject, separate topics, complexity of the individual works
etc._____
_____
_____
_____
_____

Lecturer: Sabina Khalid Hajiyeva ( )

"" _____ 20

Co-funded by the
Erasmus+ Programme
of the European Union

MINISTRY OF EDUCATION OF AZERBAIJANREPUBLIC

AZERBAIJANUNIVERSITY OF ARCHITECTURE AND CONSTRUCTION

Approved:

Head of the department S.Kh.HAJIYEVA

( )

Syllabus

Department "Architectural constructions and restoration of the monuments"

Discipline «Architectural heritage management»

1. Information on discipline

Code MİF-B02

Year of education **I** semester**I**

Faculty **Architectural**

Group M113i

Load: lectures **45** hours, individual work 45 hourss Total **60** hours.

Credits: **2**

Room: № _____

Time: _____

2. Information on lecturer:

Name and title: **HAJIYEVA S.Kh, ScD in architecture, ass.professor**

Address of the department: **AzUAC,III building, 2 floor**

Consultation hourss: _____

E-mail:

Department: **5387409**

3. Necessary books and manuals:

1.Bernard M. Feilden and Jukka Jokilehto Management Guidelines for World Cultural Heritage Sites, Rome, 1998 ISBN 92-9077-150-X
2. Управление объектами всемирного культурного наследия/Опубликовано в ноябре 2013 г. Организацией Объединённых Наций по вопросам образования, науки и культуры (ЮНЕСКО). 7, Плас де Фонтенуа, 75352 Париж 07 SP, Франция., 2013/Перевод выполнен по заказу Минкультуры России в 2014 году
3. heritage management\Handbook of Research on Heritage Management and Preservation - Google Книги_files
4. City of Vincent planning and building policy manual /heritage Policy no: 7.6.2/ heritage management – assessment
5. **Scott F. Anfinson** Practical Heritage Management: Preserving a Tangible Past/ Rowman and Littlefield,2019
6.**Management manual** / Dipl. Des. Chris Herrmann & M.A. Maria TrunkOn behalf of the PP4, City of Nuremberg (Department for Culture and Leisure)
7. Adaptive Reuse of Industrial Heritage: Opportunities & Challenges. Heritage Council Victoria, 2013.
8. Collection of Best Practices, Forget Heritage.
9. Cultural Heritage & Creative Industries: Guidelines for sustainable heritage management. GKE, 2016.
10. Guidelines for the involvement of citizens in historical sites valorization, Forget heritage.
11. Heritage Works: The use of historic buildings in regeneration. A toolkit of good practice.English Heritage, 2013.
12l. New Uses for Heritage Places: Guidelines for the adaption of historic buildings and sites. Heritage Office of New South Wales, 2008.
13. Operational Guidelines for the Implementation of the World Heritage Convention, UNESCO.

4. Description and the goals of the discipline:

Subject "Architecturalheritagemanagement" is intended to teach graduate students with a mechanism for the protection of an architectural monument. This implies not only the process of its research and subsequent restoration, but also the further functioning of the object; the correct selection of the method of protection and use of the monument, the selection of qualified specialists in this field; criteria for assessing the monument, as well as the viability of its functioning after measures for its protection.

PURPOSE OF THE COURSE "Architectural heritage management"is to introduce to the students, the main aspects and requirements to the architectural sites preservation and management. Mostly the requirements given in the lectures dedicated to the management of the World Heritage sites. But these actions also must be used in the preservation of all the other monuments of architecture as well. The main idea of the management requirements is to preserve the monument in the best way because different authorities are interested in different aspects of monuments' life and functioning. Politicians and administrators will be primarily interested in the principles, theDirector-General in the policy, and the staff in the practicalities of sitemanagement. Conservation theory should guide all actions. The site manager iscaught between daily problems and the larger issues imposed by supervisors, whohave an eye on the budget but for whom the prime need is to conserve the WorldHeritage site.The enjoyment of our heritage depends upon its conservation. These guidelinesaim to assist site managers to fulfil this role with the support of a commission ofexperts, by understanding *what it is that makes the site significant* and protectingit from the numerous threats to which it is exposed.World Heritage demonstrates that the industry, craftsmanship, love

and care ofpast civilizations were given to make their surroundings meaningful. This shouldnever cease to fill us with wonder. The past can speak to us and help us realizewhere we are going in the future.

The course includes under mentioned questions:

- Introduction to the guiding principles
- General policy of the convention
- Evaluation for conservation
- Management of world heritage sites
- Management by resource projects
- Maintenance programme
- Staffing and personnel services
- Treatments and authenticity
- Urban planning and world heritage towns
- Visitors to world heritage sites

OBJECTIVES OF THE COURSE:

To familiarize students with the basic provisions of this scientific discipline; to explore the aspects of management of architectural and historical sites, learning and development, and the formation of modern time, starting with ancient period and growing up to science.

REQUIREMENTS TO THE COURSE PERCEPTION:

- Understanding of the requirements and main positions of the course
- Perception of the right model of preservation
- Understanding of the main aspects of management of world heritage sites
- Knowledge on the main tendencies and requirements to documentation in Management projects
- Understanding of the role of staff and personnel services, requirements to them
- Ways of treatments on monuments and preservation of their authenticity
- Understanding of the management way in the world heritage towns
- Knowledge on regulation of Vvsitors to world heritage sites

SECTIONS OF THE COURSE

The course consists of one section which consists of **lectures** (30 hours).

Student must demonstrate the acquired knowledge by presenting a draftproject for research, conservation measures and further management of the architectural monument (site) in Azerbaijan in order to receive his monthly assessment. One project from the under mentioned topics should be chosen by student and developed during semester.

To get extra points for extracurricular activities (free works), the student can submit an essay on one of the proposed topics on examples of the conservation and use of real objects of architectural heritage.

5. The planned schedule of the subject:

5.1. Topics and summary of lectures

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4
1	**LECTURE 1.**	**2hours**	

	Introduction to the guiding principles Objectives. Documentation. Work plans. Preventive maintenance. Personnel. Site commission		
2-3	**LECTURE 2.** **General policy of the convention** The world heritage committee. Operational guidelines. Nomination to the world heritage list. Global strategy. Objectives of protection and conservation. List of world heritage in danger. Removal from the world heritage list. The emblem	**4hours**	
4	**LECTURE 3.** **Evaluation for conservation** What is cultural heritage today? What defines world cultural heritage ? What is protected in a monument or site ? Critical process. Values related to a heritage resource. Definition of the heritage resource. Historical time line. What is authenticity? What values influence treatments? Cultural values. Contemporary socio-economic values	**4hourss**	
5-6	**LECTURE 4.** **Management of world heritage sites** Management. Objectives of management. Data on which the management plan is based. Inventory and documentation. Information management. Research planning . General schedule. Administration. Cost control and policy. Legal instruments . Programming. Programme review and future planning **Budgeting.** Unesco's role. Checklist for management	**4 hours**	
7	**LECTURE 5.** **Management by resource projects** Management plan preparation. Procedure.. Requirements. Preparation and consultation procedures. Reporting. Short-term reporting and review. Long-term reporting and review. Format of the management plan. Comments on the format. Presentation of management plans	**4hours**	
8	**LECTURE 6.** **Maintenance programme** Preventive maintenance. Professional input. The context of inspecting historic buildings and sites Monitoring a maintenance programme. *Management guidelines for world cultural heritage sites*. Special problems. Vandalism and theft. Fire detection and protection	**4hourss**	
9	**LECTURE 7.** **Staffing and personnel services** Site commission. Staffing for general management. Selection of experts and professionals. Staffing requirements. Need for qualified personnel. The role of conservation crafts .Good workmanship. Examples of conservation skills. Conservation architects and their teams of co-workers. Architectural conservators. Art and archaeological conservators. Heritage recorders. Recruitment and careers. Conservation facilities . Personnel management. Contracted services. Standards and training	**6 hours**	
10-11	**LECTURE 8.** **Treatments and authenticity** Aim of treatments. Preparedness. Priorities. Definition of treatment approaches. Treatments and architecture. Treatments and ruins .How does treatment relate to authenticity. Treatments related to authenticity in material. Treatments related to authenticity in workmanship Treatments related to authenticity in design. Treatments related to authenticity in setting. Checklist for management	**6hours**	
12-13	**LECTURE 9.** **Urban planning and world heritage towns** Qualities of historic towns. Threats to historic towns. objectives of planning. Integrated conservation. Control of change. Planning procedure. Inspections and	**6hours**	

	surveys. Implementation. Demands on staff. Conservation report and plan. Degrees of intervention. Maintenance. Rehabilitation. Infill design. Administrative actions. Checklist for urban conservation		
14-15	**LECTURE 10.** **Visitors to world heritage sites** Needs of visitors. Vandalism and damage. Welcoming the visitors Site maintenance. Presentation and interpretation. Visitor management	**5 hours**	
	TOTAL	**45 HOURS**	

5.2. Topics of draft projects for Azerbaijani architectural sites

Number	TOPICS
1	Management plan of Icheri sheher. Study of the existed plan.
2	Management plan of Gobustan. Study of the existed plan.
3	Management plan of ShekiYukharl bash. Study of the existed plan.
4	Management plan of Kish church area. Study of the monument and development of the management plan
5	Management plan of Lagidj. Study of the monument and development of the management plan
6	Management plan of Basqal. Study of the monument and development of the management plan
7	Management plan of the village in Absheron. Study of the monuments and development of the management plan
8	Management plan of Gum basilica in Gakh region. Study of the monument and development of the management plan

5.3.Topics of essay for free works

Number	TOPICS
1.	World heritage site in Italy or any other european country. Study, preservation, management. Positive and negative factors.
2.	World heritage site in Japan or any other asian country. Study, preservation, management. Positive and negative factors.
3.	World heritage site in ITurkey. Study, preservation, management. Positive and negative factors.
4.	World heritage site in IIran. Study, preservation, management. Positive and negative factors.

5.	World heritage site in Russia. Or any other pst-sovient country. Study, preservation, management
6.	World heritage site in Azerbaijan. Study, preservation, management. Positive and negative factors.

6. Requirements for attendance.

The maximum number of points for attendance is 10 points. In the case of students' attending all classes during the semester, he gets 10 points. Every 10 % of the total number of missed classes result in the loss of 1 point. In the case of exceeding the allowable limit of missed classes the student is not allowed to attend the exam. Special desicion should be decided on his further fate.

7. Assessment of student knowledge

The maximum number of points for knowledge is 100. 50 of them student gaining during the semester, 50 - on the exam. Scored during the semester 50 points included: 10 points per visiting, 10 points for additional work, 30 points for the results of laboratory classes or seminars. If the discipline has course work (project), then 20 points are awarded for the results of seminar or laboratory studies and 10 - for the implementation of the course work (project).

During the examination student must score at least 17 points. In the case of more than 25% of missed classes, the student is not allowed to exam.

According to the European Credit System for the results of points accumulated for the semester, the student is evaluated as follows:

Less than 51 points	–	«non satisfactory»	– F
51 - 60 points	–	«acceptably»	– E
61 - 70 points	–	"satisfactory"	– D
71 - 80 points	–	«good»	– C
81 - 90 points	–	"very good"	– B
91 - 100 points	–	"best"	– A

8. Violation of the rules of conduct. In case of violation by the student the code of conduct provided by the University it can be applied activities under the Regulations

9. Requirements for the level of the course content familiarization:

At the end of the course the student should:

• know the history of architecture of ancient Azerbaijan and formation of the restoration and architectural science, to be familiar with the basic stages of development of the architecture of Azerbaijan;

• have a clear idea of the new scientific discipline

10. Study the opinion of students about the subject

After completing the course we will interview the students for clarifying their relation to the subject, separate topics, complexity of the individual works

etc._____
_____
_____
_____
_____

Lecturer: Sabina Khalid Hajiyeva ( )

“_____”_____ 20__ .

MINISTRY OF EDUCATION OF AZERBAIJAN REPUBLIC

AZERBAIJAN UNIVERSITY OF ARCHITECTURE AND CONSTRUCTION

Approved:

Head of the department S/Kh.Hajiyeva

“” _____ 20.

Syllabus

Department “Architectural constructions and restoration of the monuments”

Discipline «Historical structural systems and construction materials »

1. Information on discipline

Code ___MIF-B04A_____

Year of education **II** semester**III**

Faculty **Architectural**

Group

Load: lectures **30** hours, seminars **0** hours, course project **0**hours

laboratorial _____ hours. Total **30** hours.

Credits: **4**

Assessment type: (Essay/ report/ test/ exam/ project etc)

Room: № _____

Time: _____

2. Information on lecturer:

Name and title: **Akhundova S.A.., PhD in architecture, ass. professor**

Address of the department: **AzUAC, III building, 2 floor**

Consultation hours: _____

E-mail:

Department: **5387409**

3. Necessary books and manuals:

Books in Azery and Russian:

1. AxundovaS.Ə. Memarlıqabidələrinbərpasında regional xüsussiyyətlər.Bakı.,2008.
2. **Məmmədova Z.G.** Memarlıqabidələrininbərpasınınəsasları. Bakı, 2004
3. **Məmmədzadə K.M.** Azərbaycanınınşaattexnikası. Bakı ş. 1978 .
4. Mədəniirsinqorunmasınadairnormativhüquqiaktlartoplusu, Bakı, 2001
5. Методика и практика сохранения памятников архитектуры. М, 1974.
6. **Михайловский Е.В.** Реставрация памятников архитектуры.Развитиеисторическихконцепций. М., 1971.
7. История и теория реставрации памятников архитектуры. М., 1986.
8. **Мамедов Ф.Г.** Архитектурные связи школ зодчества средневекового Азербайджана. Баку.1988г.

Books in English

1. **Cezare Brandi.** Theory of restoration/ Nardini editore, 2005
2. **Convention concerning the Protection** of the World Cultural and Natural Heritage 1972, Paris, 16 November 1972
3. **Bernard M.Feilden**. Conservation of historic buildings. InternationalCenter for Study of the Preservation and the Restoration of Cultural Property (ICCROM), Rome.
4. **Insall Donald W**. The practical care of old buildings today. London: The Architectural Press, 1972. 198 p.
5. **Pane Roberto.** Principles of restoration of historic monuments / Proceedings of UNESCO: Monuments and sites of history and art and archaeological excavations. Problems of today-Museum, Volume III/No I. 1950.
6. **Strike James.** Architecture in Conservation. London and New York: Routledge, 1994.164 p.
7. **The Athens Charter** for the Restoration of Historic Monuments adopted at the First International Congress of Architects and Technicians of Historic Monuments, Athens 1931
8. **Weaver Martin E, Matero F.G.** Conserving Buildings. Guide to techniques and Materials. New York: John Wiley and Sons Inc, 1993. 270 p.

4. Description and the goals of the discipline:

PURPOSE OF THE COURSE «Historical structural systems and construction materials » is to introduce to the students analyses of the local peculiarities in the restorationof the architectural monuments, their study, definition of the building technique and art, study and research on the architectural schools existed in Azerbaijan. Influence of the natural- climatic factor on the development of local features in architecture and choose of the construction materials connected to that.

COURSE TITLE - to familiarize students with construction techniques, used in restoration ofmonuments of architecture and construction, with medieval forms and constructions, as well as configuration and assembly of ancient antiquity, Christianity and Islam during his study of architecture, construction techniques in the buildings of different purposes.

3. ROLE OF THE COURSE IN THE TRAINING OF STUDENTS

The objectives of the course is to familiarize students with the history of the ancient architecture of Azerbaijan, which is the first step in teaching students the history of architecture. Here, the role of monuments in public life in modern man world view, including the building as an architectural monument from the action program have been accepted widely perceived as an objective and scientific basis for recovery on the connection between imagination. That is why the importance of this course is increase, acquaintance with it paves the way for further study of the history of architecture of Azerbaijan in subsequent periods. In addition, interaction of Azerbaijan architecture and architecture of other countries in the region take the place during the course, as well as the place of architecture of Azerbaijan studied in the development of architecture in the region. This creates a good base for exploring the architecture of Azerbaijan in the global context.

REQUIREMENTS FOR THE COURSE PERSEPTION.

- Study of the local architectural features in the restoration of monuments
- Study of architectural schools existed in Medieval period
-Construction machinery and art in Azerbaijan, East olkələriilə effect interaction

SECTIONS OF THE COURSE.

The course consists of one section which consists of **lectures** (30 hours) 9. Student must fulfill a essay on topics of lectures.

5. The planned schedule of the subject:

5.1. Topics and summary of lectures

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4
1	**THEME 1. STUDY AND RESEARCH ON REGIONAL FEATURES IN THE RESTORATION OF ARCHITECTURAL MONUMNETS** This topic is dedicated to definion of the importance of main architecural regional peculiarities in the restoration process. How to understand the regional features and how to use them in restoration. Study of the main architectural schools of Azerbaijan in the Medieval period and their influence on the further	**2 HOURS**	

	architecture. Their influence on locak Moslem architectural school.		
2	**THEME 2. ROLE OF THE LOCAL BUILDING TECHNIQUES AND ARTS IN THE RESTORATION OF THE ARCHITECTURAL MONUMENTS** Society that creates architectural monuments, reason and organization of the construction process, architectural materials applied for construction, methods and ways of construction. Development, functionality, artistic features and harmonization in construction.	**2 HOURS**	
3	**THEME 3. NATURAL- CLIMATIC CONDITIONS OF THE APPEARANCE OF ARCHITECTURAL SCHOOLS IN AZERBAIJAN** Influence of the different climatic zones on the formation of local materials. Appearance and development of different constructions and elements (arches, stalactites, domes etc.). Choose and usage of the materials depending on local conditions. Special measures on constructions' streigtening in the zones of highseysmic activity.	**2 HOURS**	
4	**THEME 4. ARCHITECTURE AND IDEOLOGY** Forming the religiouse views in Azerbaijan and Near EAST. Their influence on formation of the architectural forming.Influence of the zoroastrianizm, christianity and islan existed once on the Azerbaijan territory on the formation and development of the konstructive, planning and kompositional peculiarities of azerbaijani architecture.	**2 HOURS**	
5	**THEME 5. MAIN CHARACTERISTICS OF THE ARCHITECURAL SCHOOLS IN AZERBAIJAN** Architectural schools- Shirvan-Absheron, Nackchivan, Tabriz andAran-Garabakh, formed in Azerbaijan. Their features and role in the architecture of Azerbaijan	**2 HOURS**	
6	**THEME 6. ROLE OF THE CONSTRUCTION TECHNIQUES AND MATERIALS IN THE RESTORATION** Study of the architecural heritage. Clay architecture. Role and importance of the constructions and building materials in the architecture. Building techniques used for walls, foundations, columns etc construction in different historical stages.	**2 HOURS**	
7	**THEME 7. PECULIARITIES OF COMPOSITION AND FORM SHAIPING** Usage and development of different forms, constructions, building types during many centuries. Several existed arch and vaults' types. Appearance of the vaults in architecure and their influence on further architectural types. Dome construction in the round temples of Caucasian Albania. Usage of stalaktites in the architecture of Islamic period as one of the main construction and compositional elements.	**4 HOURS**	
	THEME 8. PECULIARITIES OF RESTORATION OF THE BUILDINGS CONSTRUCTED FROM BRICK		

8	Brick as one of the main construction materials used in architecture. Problems of restoration in the buildings constructed from brick. Features of brick masonry usage and restoration.Facade ornaments from bricks. Requerements to bricks used for restoration.	**4 HOURS**	
9	**THEME 9. PECULIARITIES OF RESTORATION OF THE BUILDINGS CONSTRUCTED FROM STONE** Stone as one of the main construction materials used in architecture. Stone in the architecture of some fortresses in Nackchivan. Stone as the main material in the Baku- Absheron architcetural school. Features of the walls constructed from stones. Development of construction from stones in the 10-13th centuries. Requerements to stones used for restoration.	**4 HOURS**	
10	**THEME 10. Evaluation**	**4** HOURS	

5.2. Topics of essay

Number	Theme
1.	Stoney masonry in GyzGalasy- Maiden tower
2.	Sony decorations in Divankhabe
3.	Ornaments in the Shirvnshakh palace (Mausoleum, mosque etc.)
4.	Arch plot in Icherysheher
5.	Ornamet of “shebeke” in the Sheki khans’ Palace
6.	Qarabaglar mausoleum in Barda. Ornamentation.
7.	Qarabaglar mausoleum in Djuqa. Ornamentation.
8.	Gyandjasar monastery’ ornamentation.
9.	Albanian khachdashs. Ornamentation and symbolism.
10.	Albanian khachdashs. Ornamentation and symbolism.

6. Requirements for attendance

The maximum number of points for attendance is 10 points. In the case of students' attending all classes during the semester, he gets 10 points. Every 10 % of the total number of missed classes result in the loss of 1 point. In the case of exceeding the allowable limit of missed classes the student is not allowed to attend the exam. Special desicion should be decided on his further fate.

7. Assessment of student knowledge

The maximum number of points for knowledge is 100. 50 of them student gaining during the semester, 50 - on the exam. Scored during the semester 50 points included: 10 points per visiting, 10 points for additional work, 30 points for the results of laboratory classes or seminars. If the discipline has course work (project), then 20 points are awarded for the results of seminar or laboratory studies and 10 - for the implementation of the course work (project).

During the examination student must score at least 17 points. In the case of more than 30% of missed classes, the student is not allowed to exam.

According to the European Credit System for the results of points accumulated for the semester, the student is evaluated as follows:

Less than 51 points	–	«non satisfactory»	– F
51 - 60 points	–	«acceptably»	– E
61 - 70 points	–	"satisfactory"	– D
71 - 80 points	–	«good»	– C
81 - 90 points	–	"very good"	– B
91 - 100 points	–	"best"	– A

8. Violation of the rules of conduct. In case of violation by the student the code of conduct provided by the University it can be applied activities under the Regulations

9. Requirements for the level of the course content familiarization:

At the end of the course the student should:

• know the history of architecture of ancient Azerbaijan and formation of the restoration and architectural science, to be familiar with the basic stages of development of the architecture of Azerbaijan;

• have a clear idea of the new scientific discipline

10. Study the opinion of students about the subject

After completing the course we will interview the students for clarifying their relation to the subject, separate topics, complexity of the individual works
etc._____
_____
_____
_____
_____

Lecturer: S.A.Akhundova ( )

"_____" _____ 20

Co-funded by the Erasmus+ Programme of the European Union

MINISTRY OF EDUCATION OF AZERBAIJAN REPUBLIC

AZERBAIJAN UNIVERSITY OF ARCHITECTURE AND CONSTRUCTION

Approved:

Head of the department S.Kh.Hajiyeva

"--" ---------- 20---.

Syllabus

Department "Architectural constructions and restoration of the monuments"

Discipline « Seminar in conservation of cultural heritage »

1. Information on discipline

Code MİF -B04A

Year of education **I, II** semester **II, III**

Faculty **Architectural**

Group M133i

Load: practice **120** hours, individual work **360**hours. Total **480** hours.

Credits: **16**

Room: № _____

Time: _____

2. Information on lecturer:

Name and title: **Abdulrahimov R.H. ScD in architecture, professor**

Address of the department: **AzUAC, III building, 2 floor**

Consultation hours: _____

E-mail:

Department: **5387409**

3. Necessary books and manuals:

1. Вопросы реставрации памятников зодчества Азербайджана Издательство АН Азерб. ССР, Баку, 1960.
1. 2.М.Усейнов, Л.Бретаницкий, А.Саламзаде История архитектуры Азербайджана. – Москва, 1963.
2. Ш.С.Фатуллаев – Градостроительство и архитектура Азербайджана XIX – начала XX века. Ленинград, 1986.
3. K.M.Məmmədzadə – Azərbaycanda inşaat sənəti. Bakı, 1978
4. Cəfər Qiyasi - Nizami dövrü memarlıq abidələri. Bakı, 1991.
5. Д.А.Ахундов – Архитектура древнего и раннесредневекового Азербайджана. Баку, 1986.
6. Г.Г.Мамедова – Культовое зодчество Кавказской Албании.Баку, 1997.
7. В.И.Керимов – Оборонительные сооружения Азербайджана. Баку, 1998.
8. С.С.Подъяпольский, Г.Б.Бессонов, Л.А.Беляев и другие – Реставрация памятников архитектуры. Москва, 1988.
10. Prof. Dr. Ramiz Abdülrahimov -Restorasyonda yapım teknikleri. – Trabzon, 1999.
11. Э.М. Гендель - Инженерные работы при реставрации памятников архитектуры. Москва, Стройиздат, 1980.
12. Методика реставрации памятников архитектуры.Пособие для архитекторов – реставраторов. Москва, 1961.

4. Description and the goals of the discipline:

PURPOSE OF THE COURSE
The aim of the course is to detect the quality of a valuable architectural heritage, focusing on the skills needed to work over the project, restoring monument and adapting it for re-use.

COURSE OBJECTION– the study of problems in the field of architectural heritage restoration and reconstruction of the buildings, as well as formation of the project habits. To acquaint the students with the specifics of restoration project, to explain how to conduct the scientifical research (historical and archival), how to realize the restoration of architectural monuments, how to conduct the natural study of the monument, and restoration project of the monument and project of adaptation for modern use is necessary.

ROLE OF THE COURSE IN THE TRAINING OF STUDENTS.
The course is one of the most important sections for the qualification. The project of restoration or reconstruction of any of architectural monuments studied by student in his master thesis during the course and work on the essay on the topic of master thesis should help to students in their thesis preparation.

5. The planned schedule of the subject:

The course consicts of the two parts (one for each semester). Both of them are subject to assist student in individual preparation of the master thesis.

During **1-st semester** student should prepare essay of his future thesis. Essay should be written on the topic of the master thesis and should include all the positions and statements of the research. Student should undestand clearly the main objection of his work for future two year of study. Essay should include the main aspects of scientific research on the topic, main ways of investigation, information on historical research including archive and bibliographical study; information on existed already researches in the same field, study of the articles and books dedicated to the topic, the problems and lacks in the field of study, collection of the information on the analogical investigations inn the country and abroad etc. Thus student should demonstrate his abilities to work individually on the scientific topic and to collect all nesessary natural and scietifical information for thesis. At the end of first part of course student should defend his Essay to be able to be experienced for the final defense.

During 2-nd semester student should work on the project of restoration or conservation of any of architectural monuments studied by him in his (her) master thesis, as well as give his recommendations on the future- use of the monument and to work out the project of the adaptation of the monument etc. The project of restoration is subject to be included into the graphical part of the master thesis.

5.1. Topics and summary of practical lessons

(Part 1- essay)- 60 hours

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4
1-2	Definition of the main statements and objectives for the essay, main aspects of scientific research on the topic, main ways of investigation	**4 HOURS**	
3-4	Collection of the information on historical research including archive and bibliographical study	**4 HOURS**	
5-6	Collection of the information on existed already researches in the same field, study of the articles and books dedicated to the topic	**4 HOURS**	
7-8	Definition of the problems and lacks in the field of study	**4 HOURS**	
9-10	Definition of the ways of the problem desigion	**4 HOURS**	
11-12	Collection of the information on the analogical investigations inn the country and abroad	**4 HOURS**	
13-14	Study of the draft essay. Discussion of the results, of the problems to be studied diper, of the ways of essay's development etc.	**4 HOURS**	
15	Essay's defense as first experience for student	**4 HOURS**	

5.2. Topics and summary of practical lessons

(Part 2- project of preservation of architectural monument)- 6- hours

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4

1-3	**Theme № 1** Croquies with measures, details, connection of the building to the site	**4**	
4	**Theme № 2** Photo fixation: facades, interiors, details, description of the problematic zones in the monument	**4**	
5-7	**Theme № 3** Measurement drawings- facades and walls or sections, plans, details, plafond with detailed measures	**4**	
8-9	**Theme № 4** Diagnostics of the facades and interiors	**4**	
10	**Theme № 5** Analogical monuments	**4**	
11-13	**Theme № 6** Restoration drawings- facades and walls or sections, plans, details, plafond with detailed measures	**4**	
14-15	**Theme № 7** Drawings on adaptation of the monuments to the new use- sketches of facades and interiors, site improvement etc.	**4**	

6. Requirements for attendance.

The maximum number of points for attendance is 10 points. In the case of students' attending all classes during the semester, he gets 10 points. Every 10 % of the total number of missed classes result in the loss of 1 point. In the case of exceeding the allowable limit of missed classes the student is not allowed to attend the exam. Special desicion should be decided on his further fate.

7. Assessment of student knowledge

The maximum number of points for knowledge is 100. 50 of them student gaining during the semester, 50 - on the exam. Scored during the semester 50 points included: 10 points per visiting, 10 points for additional work, 30 points for the results of laboratory classes or seminars. If the discipline has course work (project), then 20 points are awarded for the results of seminar or laboratory studies and 10 - for the implementation of the course work (project).

During the examination student must score at least 17 points. In the case of more than 30% of missed classes, the student is not allowed to exam.

According to the European Credit System for the results of points accumulated for the semester, the student is evaluated as follows:

Less than 51 points	–	«non satisfactory»	– F
51 - 60 points	–	«acceptably»	– E
61 - 70 points	–	"satisfactory"	– D
71 - 80 points	–	«good»	– C
81 - 90 points	–	"very good"	– B
91 - 100 points	–	"best"	– A

8. Violation of the rules of conduct. In case of violation by the student the code of conduct provided by the University it can be applied activities under the Regulations

9. Requirements for the level of the course content familiarization:

At the end of the course the student should:

• know the history of architecture of ancient Azerbaijan and formation of the restoration and architectural science, to be familiar with the basic stages of development of the architecture of Azerbaijan;

• have a clear idea of the new scientific discipline

10. Study the opinion of students about the subject

After completing the course we will interview the students for clarifying their relation to the subject, separate topics, complexity of the individual works
etc._____
_____
_____
_____
_____

Lecturer: ( )

“_____”_____ 20__ .

MINISTRY OF EDUCATION OF THE REPUBLIC OF AZERBAIJAN

AZERBAIJAN UNIVERSITY OF ARCHITECTURE AND CONSTRUCTION

Approved:

Head of the department Dr. Sabina Hajiyeva

“----” ---------- 20.

SYLLABUS

Department for “Architectural constructions and restoration of the monuments”

Discipline " Modern preservation technology ".

1. Information on discipline

Year of study - 1, semester – 1.

Faculty: Architecture

Part for the semester 1: lectures 30 hours, out of university lessons (as voluntaire) work – seminars 10 hours.

Total for the semester 1: 30 hours.

2. About of lecturer:

Rizvan Bayramov, PhD in architecture, associate professor

University of Architecture and Construction,

E-mail: rizvanbayram@yahoo.com

3. Selected bibliography:

9. Вопросы реставрации памятников зодчества Азербайджана. Баку, 1960.
10. Реставрация памятников архитектуры. Москва, 1988.
11. Zahidə Məmmədova. Архитектурное наследие и реставрация. Москва, 1986.Memarlıq abidələrinin bərpasının əsasları. Bakı, 2004.
12. Visual Dictionary of Architecture. Printed in USA, 1995.
13. Ruins. The conservation and repair of masonry ruins. Dublin, 2010.
14. Conservation turn-Return to conservation. Florence, 2004.
15. Historical and philosophical issues in the conservation of cultural heritage. Los Angelos, 2006.
16. Conservation of historical buildings. Rome, 2001.
17. The conservation and structural restoration of architectural heritage. UK and Boston, USA, 2001.
18. Schience and technology for mthe safeguarding of cultural heritage. Moscow, Venice, 2005.
19. Conservation of living relegious heritage. ICCROM, Rome, 2005.
20. Cesare Brandi. Theory of restoration.Firenze, 2005.
21. Earth construction. London, 2001.
22. Conservation of archaeological excovation. ICCROM, rome, 2004.
23. Repair and strengthening interventions on vertical and horizontal elements. Padova, 2003.
24. Repair and strengthening of historic masonry buildings in seismic areas.
25. Guides to repair of historic brickwork. Dublin, 2009.
26. The conservation of scheduled masonry monuments. Belfast.
27. Stone conservation. Principles and Practice. Taylor and Francis, 2006.

4. Description and the goals of the discipline:

- Goal of the course:

- Study of the principles, methods and ways for preservation of historical buildings, structures and sites.

- Development of professional skills and creativity in definition of monuments and sites preservation.

- Mastery of the principles heritage preservation solutions;

- Requirements for knowledge, skills and abilities.

- Know the principles of historical buildings, structures and sites preservation.
- Requirements to choose the best way for historical monuments and sites preservation.
-Materials and technology for the building heritage preservation and ruins.
- Be able to find rational decisions for building heritage preservation.
-Be able to find the rational decisions for heritage building new life and utilization.

5. The planned schedule of the subject:

5.1. Topics and summary of lectures for the semestr 1.

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4
1	LECTURE 1. Country and international organisations low, rules, guiedlance and requirements to the preservation.	2	
2	LECTURE 2. What means conservation, restouration and reconstruction?	2	
3	LECTURE 3. Planning for preservation of building heritage.	2	
4	LECTURE 4. Common defects found in ruined structures.	2	
5	LECTURE 5. Wall preservation. Part 1.	2	
6	LECTURE 6. Wall preservation. Part 2.	2	
7	LECTURE 7. Wall capping.	2	
8	LECTURE 8. Restoration and consolidation of arches and vaults.	2	

9	LECTURE 9. Restoration and consolidation of cupolas.	2	
10	LECTURE 10. Consolidation and restoration of foundations.	2	
11	LECTURE 11. Waterproofing of foundation.	2	
12	LECTURE 12. Material using for preservation of historical monuments and sites.	2	
13	LECTURE 13. New life of ruins.	2	
14	LECTURE 14. Archaeological sites preservation.	2	
15	LECTURE 15. New life and utilasation of historical site and monuments.	2	

5.2. Topics of seminars (exercises) and their summary for the semestr 1.

Weeks	Topics and summary of seminars and sudents presentations.	Hours	Date
1	2	3	4
	Theme № 1 Planning for preservation of building heritage.	2	
	Theme № 2 Common defects found in ruined structures.	2	
	Theme № 3 Arches, vaults and cupola restoration and consolidation.	2	
	Theme № 4 Walls and foundation restoration and consolidation.	2	
	Theme № 5 New life of building heritage and ruins.	2	

6. Requirements for attendance.

The maximum number of points for attendance during one semester is 10 points. In the case of students' attending all classes during the semester, he gets 10 points. Every 10 % of the total number of missed classes result in the loss of 1 point. In the case of exceeding the allowable limit of missed classes the student is not allowed to attend the exam. Special desicion should be decided on his further fate.

7. Assessment of student knowledge.

The maximum number of points for knowledge during the one semester is 100. 50 of them student gaining during the semester, 50 - on the exam. Scored during the semester 50 points included: 10 points per visiting, 10 points for additional work, 30 points for the results of laboratory classes or seminars. If the discipline has course work (project), then 20 points are awarded for the results of seminar or laboratory studies and 10 - for the implementation of the course work (project).

During the examination student must score at least 17 points. In the case of more than 30% of missed classes, the student is not allowed to exam.

According to the European Credit System for the results of points accumulated for the semester, the student is evaluated as follows:

Less than 51 points	–	«non satisfactory»	– F
51 - 60 points	–	«acceptably»	– E
61 - 70 points	–	"satisfactory"	– D
71 - 80 points	–	«good»	– C
81 - 90 points	–	"very good"	– B
91 - 100 points	–	"best"	– A

8. Violation of the rules of conduct.

In case of violation by the student the code of conduct provided by the University it can be applied activities under the approved Regulations of the University.

Signature of Lecturer: _____

"_____"_____ 20---.

Co-funded by the Erasmus+ Programme of the European Union

MINISTRY OF EDUCATION OF AZERBAIJAN REPUBLIC

AZERBAIJAN UNIVERSITY OF ARCHITECTURE AND CONSTRUCTION

Approved:

Head of the department prof/ Hajiyeva S.Kh.

“”_____ 20.

Syllabus

Department “Architectural constructions and restoration of the monuments”

Discipline " Theory of restoration and conservation "

1. Information on discipline

Code

Year of education semester

Faculty **Architectural**

Group_____

Load: lectures **45** hours, seminars **30** hours, Total **75** hours.

Кредиты: **6**

Аудитория: № _____

Время: **12.10-13.30**

2. Information on lecturer:

Name and title: **Hajiyeva S.Kh., ScD in architecture, professor**

Address of the department: **AzUAC, III building, 2 floor**

Consultation hours: _____

E-mail: **sabiks13@yahoo.com**

Department: **5387409**

3. Necessary books and manuals:

28. **Cezare Brandi.** Theory of restoration/ Nardini editore, 2005
29. **Convention concerning the Protection** of the World Cultural and Natural Heritage 1972, Paris, 16 November 1972
30. **Bernard M.Feilden**. Conservation of historic buildings. International Center for Study of the Preservation and the Restoration of Cultural Property (ICCROM), Rome.
31. **Insall Donald W**. The practical care of old buildings today. London: The Architectural Press, 1972. 198 p.
32. **Pane Roberto.** Principles of restoration of historic monuments / Proceedings of UNESCO: Monuments and sites of history and art and archaeological excavations. Problems of today- Museum, Volume III/No I. 1950.
33. **Strike James.** Architecture in Conservation. London and New York: Routledge, 1994.164 p.
34. **The Athens Charter** for the Restoration of Historic Monuments adopted at the First International Congress of Architects and Technicians of Historic Monuments, Athens 1931
35. **Weaver Martin E, Matero F.G.** Conserving Buildings. Guide to techniques and Materials. New York: John Wiley and Sons Inc, 1993. 270 p.
36. **Подъяпольский С.С., Бессонов Г.Б.и др.-** Реставрация памятников архитектуры. М., 1988.
37. **Məmmədova Z.G.** Memarlıq abidələrinin bərpasının əsasları. Bakı, 2004
38. **Məmmədova Z.G.** Bərpanın elmi- nəzəri əsasları, Bakı, 2007
10. **Вопросы реставрации памятников зодчества Азербайджана**. Баку. 1960.

4. Description and the goals of the discipline:

PURPOSE OF THE COURSE is disclosure of scientific and theoretical foundations of restoration and conservation, based on the idea of restoring the architectural heritage. The course consists of one section, which consistently reveals the formation of the restoration science, the development of the restoration of the existing theories, including the theories of stylistic and archaeological restoration and modern methods and laws in the conservation of the architectural heritage. We also consider aspects of the formation of the restoration science in Azerbaijan at different stages of history. In addition, we study in detail the current state of the engineering conservation, a complex of negative factors affecting the architectural monuments, diagnosis of the deformations in the monuments and the main methods of its implementation, and other problems.

OBJECTIVES OF THE COURSE. The main objective of the course is to familiarize students with the practical and theoretical foundations of scientific restoration of architectural monuments of historical and artistic value.

ROLE OF COURSE IN THE TRAINING OF ARCHITECTS- RESTORERS. This course is one of the core subjects in the training of students for architectural activities. Students have to get an idea of the role of monuments in modern life, in worldview and society. The course is also subjected to link the widespread perception of the restoration, scientific and theoretical basis for its implementation. Theoretical bases are considered as the result of a process of development of human culture; since culture is constantly evolving that process does not stop its development. Therefore, the main goal of any restoration is the maximum extension of the life of the monument of past eras and passing it on to future generations.

SECTION OF THE COURSE. The course consists of one section, which consists of lectures (30 hours) and practical lessons that include exercises (60 hours) and additional classes (20 hours).

During the exercises the student must fulfill during the semester course project "Restoration and conservation of the monument of architecture". The project's main goal to instill the research skills on monument of architecture, proper measurement and diagnosis of causes of the destruction of monuments of architecture, determine the causes of the destruction and deformation of the monument and correct liquidation; determining a wide range of analogies and use of this information for restoration of the monument. The student must acquire practical skills in the field of natural and archival research of the monument, the collection of historical information about the monument, making a competent project of the restoration or conservation of the monument and its adaptation for modern use.
During additional classes a student must fulfill a series of drawings and photographic images showing the architectural details in the monuments of Azerbaijan. The exercise of these drawings aims to show to students the basic methods of architectural details' construction, as well as improve the graphics capabilities of students.

5. The planned schedule of the subject:

5.1. Topics and summary of lectures

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4
1-st WEEK	***SECTION 1. FORMING THE PRINCIPLES OF RESTORATION*** **LECTURE 1. APPEARANCE OF THE INTEREST TO MONUMENTS OF ANTIQUITY and MEDIEVAL MONUMENTS. RESTORATION OF EARLY XIX CENTURY.** The attitude of society to the historical heritage as a determining factor, the recognition of humanism and ancient culture, the study of the monuments of ancient art and importance of classicism in their conservation, the importance of creativity of I.Vinkelman; emergence of archeology as a science, restoration of ancient Roman monuments (R.Stern and J. Valadier) and their distinctive features (preference of authentication, difference in materials, signation, simplification of new parts in comparison with the original, etc.). Romanticism and appeared with him an understanding of the importance of historical and artistic heritage, the French Revolution and the emergence of the state system of protection of monuments, medieval architectural monuments as the main object of restoration work, the emergence of restoration theories (John Ruskin, L.Vite, P.Merime, etc.)	**2 HOURS**	
2-nd	**LECTURE 2. "STYLISTIC RESTORATION". "ARCHAEOLOGICAL RESTORATION" AND RESTORATION THEORIES IN THE LATE XIX - EARLY XX CENTURY** Practical activities of E.E.Violle-le-Duc and the principles of stylistic restoration and tendency to give complete form to a monument, extensive use of analogies and completely change of the original look, and the extent of the stylistic restorations in Europe. The generality of the concept of assessing the importance of the restoration of monuments in post-Petrine Russia and in Western countries. Particular attitude to the restoration of the monuments of the Moscow Kremlin in the XVIII century and after the attack of Napoleon; stylistic restoration in the middle of the XIX century, new requirements for restoration activities in the late XIX- early XX centuries; restorations in 1918-1920 –ies. Criticism of stylistic restoration, historical and cultural conditions of a new attitude to the restoration of architectural monuments, a new theory of restoration, a new classification of monuments and attempts to create a new kind of restorations (K.Boyto, A.Rigl, J.Giovannoni); restoration principles based on the ratio of the	**2 HOURS**	

	monument as, first of all, the historical source; Italian Charter for restoration and decisions of Athens international Charter of restorers.		
2	**LECTURE 3. RESTORATION OF MONUMENTS. MAJOR TYPES OF RESTORATION AND OBJECTIVES. MODERN CONCEPTS OF "MONUMENT OF ARCHITECTURE " AND "RESTORATION". BASIC WORKS ON THE MONUMENTS AND THEIR APPLICATIONS** The main objectives of the restoration. Preservation of all the original parts in restored buildings and strict scientific validity of the restoration as a key requirement for restoration. Distinguishing characteristics of the concepts of "architectural", "historic" and "archaeological" monument Restoration as one of the most important types of work on the landmark. Restoration, reconstruction, conservation, valorization, etc. as the basic works on monuments. The differences in these concepts and cases of each of their application	**2 HOURS**	
3	**LECTURE 4.** **RESTORATION AFTER THE SECOND WORLD WAR** The massive destruction of architectural monuments and the problem of possibility to restore the completely lost monuments, the scale of restoration in completely lost monuments (Leningrad, Warsaw); the threat of a return to the methods of stylistic restoration during expansion of specific activities related to the elimination of the devastating effects of war.	**2 HOURS**	
4	**LECTURE 5.** **RESTORATION IN AZERBAIJAN** Preservation of the architectural heritage in Azerbaijan and its use in modern conditions. The Law of Azerbaijan Republic about the monuments. Some questions of the restoration of architectural monuments in Azerbaijan. Fortifications and their restoration. The restoration of memorials. Solving problems encountered in the process of restoration in the context of the general theoretical principles of restoration and conservation	**2 HOURS**	
4	**LECTURE 6.** **INTERNATIONAL AND NATIONAL LEGISLATION AND INTERNATIONAL DOCUMENTS IN THE FIERLD OF ARCHITECTURAL HERITAGE CONSERVATION** The Venice Charter of restorers in 1931, the International Athens Charter in 1931. The Venice Charter in 1964 for the restoration and conservation of monuments, its main provisions. The International Council for the Protection of Sites (ICOMOS). The UNESCO Convention on the Protection of International Cultural and Natural Heritage, Paris, 16 November 1972. The Law of Azerbaijan Republic on the protection of historical and cultural monuments from 10.04.1998 year. Accession to the European Convention for the Protection of the Archaeological Heritage 16.02.1992 (effective law of the Azerbaijan Republic dated 20.10.1999)	**2 HOURS**	
5	SECTION 2. INVESTIGATION OF THE ARCHITECTURAL MONUMENTS **LECTURE 7.** STUDIES IN ARCHITECTURAL MONUMENTS OF RESTORATION 1. Historical and literary material (the study of information about the building due on restoration, published in the chronicles, memoirs, special treatises, guidebooks, manuals, etc. 2. Archived documents stored in the central and local archives, repositories of scientific institutions, libraries, museums, etc. ; 3. Unpublished graphic documents (drawings, prints, drawings, photographs, etc.).	**2 HOURS**	

6	**LECTURE 8. FIXATION OF ARCHITECTURAL MONUMENTS** total fixing of the studied building (measurements, photos, description); study and description of construction materials of the building and its technical condition and the study of structural forms and decoration of the building; identification of the original appearance of the building or parts of its ancient and recent alterations; full disclosure of the building (probing , excavation). Examples of fixation	**2 HOURS**	
6	**LECTURE 9. PRODUCTION METHODS OF ARCHITECTURAL AND ARCHAEOLOGICAL MEASUREMENT** Shematichal , architectural , architectural and archaeological measurements. Sketches. Tracings. Prints. Models .Instruments used during the measurements . Main methods of measurements—triangulation, cartesian coordinates, geodesic surveying, photogrammetry Present methods of measurements- 3- D scanner and laser scanner	**2 HOURS**	
7	**LECTURE 10. THE ANALOGY STUDIES DURING RESTORATION OF MONUMENTS** stylistic analogies chronological analogy territorial analogy	**2 HOURS**	
8	**LECTURE 11. PROJECT OF RESTORATION OF MONUMENTS** Crockies. Architectural measured drawings Basic requirements for the draft project. Requirements to the drawings of the restoration or conservation. The main differences between the project of the restoration and project of the new building. Adaptation of the monuments after restoration . Project of site improvement	**2 HOURS**	
8	**LECTURE 12. ARCHAEOLOGICAL RESEARCH OF ARCHITECTURAL MONUMENTS** The main objectives of the archaeological restoration. Preparation of investigation. Open sheets. Exploration**.** Methods of excavation. Types of autopsies. Stratigraphy. Field fixation. Conservation of the excavations. Reporting.	**2 HOURS**	
9	**LECTURE 13. INVESTIGATION OF THE MONUMENTS USING SOUNDINGS** Tasks of the soundings. General requirements for the production of soundings on the monuments of architecture. The main types of soundings. Fixing soundings. Sounding is the main form of full-scale study of the monument. General requirements to soundings: inflict the least damage to the monument, purposefulness of the sounding disclosures, the study of all the information about the monument, mandatory fixing of the results of the disclosure. The main types of soundings: probing of painting layers; probing with the removal of plaster or paneling plank; probing with dismantling of masonry; studies of attics and other enclosed spaces; dismantling of the obstructions inside the building.	**2 HOURS**	
10	**LECTURE 14. LABORATORY STUDIES DURING INVESTIGATION OF ARCHITECTURAL MONUMENT** Questions architectural study to be solved with the help of laboratory tests. Identification of stone materials. Absolute dating of materials To obtain an objective picture it is necessary to conduct series of laboratory tests that provide additional and sometimes important information. All the material should be studied. Absolute dating of materials or establishing an age of the object can be obtained by written sources and the use of methods based on the study of the physical properties of some materials. Absolute and relative dating.	**2 HOURS**	
10	**LECTURE 15. SPECIAL ACTIVITIES OF ARCHITECT-RESTORER** Restoration of monuments of history. Restoration of architectural	**2**	

	ensembles. Restoration of monuments of landscape art. Restoration of works of art in the architectural monuments. Restoration of completely lost objects.	**HOURS**	
11	**LECTURE 16. MATERIALS USED IN RESTORATION** Requirements to the materials used in the restoration. Main group of materials used in restoration The process of restoration is a discovery process of the monument and its restoration. Of particular importance in the restoration takes preservation of authentic elements of the monument. Four groups of materials used in the restoration. Seven general requirements to restoration materials.	**2 HOURS**	
	LECTURE 17. FUNCTIONS Of THE ARCHITECT IN THE IMPLEMENTATION OF THE PROJECT OF RESTORATION Seven functions of the architect in the restoration are usually regarded as scientific and technical guidance. Requires full scientific report on the restoration and strict documentation of all levels of restoration and research.	**2 HOURS**	
12	**LECTURE 18. ADAPTATION OF ARCHITECTURAL MONUMENTS FOR MODERN USE. IMPROVEMENT OF MONUMENTS' SITES** The principle of function selection during adaptation- the character of the monument, planning structure of architecture monuments, valuable interiors; as well as the choice of general planning solutions based on functional requirements, the connection between the restoration and adaptation, the use of new elements, equipment, etc. Features of design of engineering services in architectural monuments. Improvement of the territory of a landmark as one of the main tasks of the architect -restorer in adapting the monument. "Protected" areas, the purpose of their creation, the size and the requirements for it. Delimitation of the buffer zone. Examples of implemented projects on improvement landmarks: Kish temple in Shaki, architectural ensembles in Samarkand and Bukhara, Uzbekistan (Registan complex, the mausoleum of the Samanids, etc.). Making the right synthesis between modern environments and architectural monuments in the course of work on the landscaping.	**2 HOURS**	
	SECTION 3. DIAGNOSTICS OF THE ARCHITECTURAL MONUMENTS **LECTURE 19.COMPLEX OF NEGATIVE FACTORS AFFECTING THE ARCHITECTURAL MONUMENT** The impact on the dynamics of the construction and foundation construction. Industrial seismic, which is the cause of soil deformation under the effect of vibration, the destruction of underground structures, the loss of structural strength, creating of the stresses in structures of architectural structures, etc. The negative impact of the area relief and the location of the monument near the underground water sources on architectural monuments, the acceleration of subsidence and destruction due to the impact of transport. The reasons of landslides, destruction of monuments as a result of soil moisture, destructive changes occurring in the monuments as result of construction of new facilities in their immediate vicinity.	**2 HOURS**	
13	**LECTURE 20 .** **TYPES OF DEFORMATIONS IN ARCHITECTURAL MONUMENTS. DETERMINATION OF THE DEFORMATIONS. DIAGNOSIS OF EXTERNAL AND INTERNAL SURFACES** Types of deformations in the architectural monuments: the deformation in the "base"- "monument" system, external factors, the instability of soils, ground deformation associated with disorders in the construction of the foundation due to subsidence, the weakness of the foundation		

	structures, earth pressure on retaining walls, excessive load on the overlap. Use of construction materials with a binder consisting of a metal frame. Secondary reasons of building structure weakening- hydrogeological conditions, the violation of the temperature and humidity conditions, the construction of the monument near the new building with a deep foundation, violation of building technology in the construction of the foundations of the building, changing the initial workload of the building, violation of overlap, etc. Reasons of different types of cracks in the monuments- vertical, horizontal, bending, mixed, and others. Determination of destruction in the structure or of its parts under the influence of hydrostatic and other factors such as landslides, sagging, compression, shrinkage, deflection or movement of underground or aboveground components. Activity, caused in deformation of the monument (short-and long-term effects). Mechanical and physical effects and other factors. Characterization of the state of external surfaces of an architectural monument (facades and coverings). The research, analysis and diagnosis of building's condition as a main stage in production of restoration and conservation work to strengthen it. Proper preparation of the constructive, architectural and engineering drawings and technical and scientific tasks. Characteristics of the current state of the internal surfaces of the architectural monument (interior walls, floor and ceiling). Types of damage in the building materials, architectural decoration, structural elements of an architectural monument. Examples of anti- moisture, protection walls yielding into the soil, creating a drain on the outside perimeter of the building.	**4 HOURS**	
14-15	**SECTIION 4. ENGINEERING STRENGTHENING OF THE MONUMENTS OF ARCHITECTURE** **LECTURE 21. METHODS OF ENGINEERING STRENGTHENING OF THE MONUMENTS OF ARCHITECTURE UNDER DESTRUCTION** Principles for the strengthening of the deformed masonry walls, methods of strengthening of unstable structures, hidden and open constructive strengthening of architectural monuments. The importance of special engineering and structural studies of individual elements and parts of architectural monuments, building and finishing materials, soil base, etc. Report (Final result) including all the collected by specialists material and other technical documents .Characteristics of the arch-vaulted systems of the monument bearing the function of support and depending directly on the state of the vertical structure of the building. The reasons for their deformation and fracture: vertical movement of the structure (walls, piers, columns, etc.), moving parts of the foundation as a result of subsidence of the structural supporting elements, the destruction of the binding frame while moving the heel of the arches in the vertical direction. **total**	**3 HOURS** **45 hours**	

5.2. Topics of seminars (exercises) and their summary

The main objective of practical training- to teach how to conduct measurement and investogation of the landmark, preparation of drawings of the initial stages of restoration and conservation work. All

this is reflected in course project **"Restoration or conservation of architectural monument",** which is performed in the form of explanatory notes and the graphics part (30 hours)

Weeks	Topics and summary of seminars	Hours	Date
1	2	3	4
1-3	**Theme № 1** Croquies with measures, details, connection of the building to the site	**6**	
4	**Theme № 2** Photofixation: facades, interiors, detailes, description of the problematic zones in the monument	**4**	
5-7	**Theme № 3** Measurement drawings- facades and walls or sections, plans, details, plafond with detailed measures	**6**	
8-9	**Theme № 4** Diagnostics of the facades and interiors	**4**	
10	**Theme № 5** Analogical monuments	**2**	
11-13	**Theme № 6** Restoration drawings- facades and walls or sections, plans, details, plafond with detailed measures	**4**	
14-15	**Theme № 7** Drawings on adaptation of the monuments to the new use- sketches of facades and interiors, site improvement etc.	**4**	

5.4. Topics of cours projects and their summary

Weeks	Topics and summary of seminars	Hours	Date
1	2	3	**4**
1-3	**Theme № 1** Croquies with measures, details, connection of the building to the site	**6**	
4	**Theme № 2** Photofixation: facades, interiors, detailes, description of the problematic zones in the monument	**4**	
5-7	**Theme № 3** Measurement drawings- facades and walls or sections, plans, details, plafond with detailed measures	**6**	
8-9	**Theme № 4** Diagnostics of the facades and interiors	**4**	
10	**Theme № 5** Analogical monuments	**2**	

11-13	**Theme № 6** Restoration drawings- facades and walls or sections, plans, details, plafond with detailed measures	**4**	
14-15	**Theme № 7** Drawings on adaptation of the monuments to the new use- sketches of facades and interiors, site improvement etc.	**4**	

5.5. Topics of additional classes and their summary

Number	Theme
1.	Drawing on the topic: **Principles of the strengthening the deformed stony masonry of the wall**
2.	Drawing on the topic: **Strengthening of the unstable constructions**
3.	Drawing on the topic: **Strengthening of the foundation by Fondedille method**
4.	Drawing on the topic: **Strengthening of the foundation using concrete ring**
5.	Исполнение чертежа по теме: **Strengthening of the building using counter forth**
6.	Drawing on the topic: **Traditional method used in the case of sagging of the vaults**
7.	Drawing on the topic: **Straightening of the compact hard volumes – obelisks, pylons, stellas etc.**
8.	Drawing on the topic: **«Open» strengthening of the monuments**
9.	Drawing on the topic: **Strengthening of the arches**
10.	Drawing on the topic: **Strengthening of the domes**

6. Requirements for attendance.

The maximum number of points for attendance is 10 points. In the case of students' attending all classes during the semester, he gets 10 points. Every 10 % of the total number of missed classes result in the loss of 1 point. In the case of exceeding the allowable limit of missed classes the student is not allowed to attend the exam. Special desicion should be decided on his further fate.

7. Assessment of student knowledge

The maximum number of points for knowledge is 100. 50 of them student gaining during the semester, 50 - on the exam. Scored during the semester 50 points included: 10 points per visiting, 10 points for additional work, 30 points for the results of laboratory classes or seminars. If the discipline has course work (project), then 20 points are awarded for the results of seminar or laboratory studies and 10 - for the implementation of the course work (project).

During the examination student must score at least 17 points. In the case of more than 25% of missed classes, the student is not allowed to exam.

According to the European Credit System for the results of points accumulated for the semester, the student is evaluated as follows:

Less than 51 points	–	«non satisfactory»	– F
51 - 60 points	–	«acceptably»	– E
61 - 70 points	–	"satisfactory"	– D
71 - 80 points	–	«good»	– C
81 - 90 points	–	"very good"	– B
91 - 100 points	–	"best"	– A

8. Violation of the rules of conduct. In case of violation by the student the code of conduct provided by the University it can be applied activities under the Regulations

9. Requirements for the level of the course content familiarization:
The course introduces students to the basic works on architectural monuments, restoration and conservation of the following areas:
• General understanding of the restoration theories existing at the different historical stages of social development, including the theory of stylistic and archaeological restoration;
• General understanding of the most important results of the restoration activities taking place in the XVIII - XX centuries in Western Europe, Russia and in the twentieth century in Azerbaijan; characteristic of the restoration tradition in Azerbaijan architecture at different stages of development;
• The adaptation of monuments to modern use, the study of local and international experience in this field;
• Study of the documents and the International Republican legislation on the conservation of the architectural heritage;
• A study of the complex of negative factors affecting the architectural monuments;
• Diagnosing the deformation on architectural monuments;
• Basic methods of technical diagnostics of the causes deformations in the architectural monuments .

10. Determining the views of students on the subject:

_____
_____
_____
_____
_____
_____
_____
_____

Lecturer: _____ ( )

"_____"_____ 20__ .

Co-funded by the Erasmus+ Programme of the European Union

MINISTRY OF EDUCATION OF AZERBAIJAN REPUBLIC

AZERBAIJAN UNIVERSITY OF ARCHITECTURE AND CONSTRUCTION

Approved:

Head of the department S.Kh.Hajiyeva

( )

“” September 20.

Syllabus

Department “Architectural constructions and restoration of the monuments”

Discipline « Typology of Azerbaijan architectural monuments »

1. Information on discipline

Code MİF- B05E

Year of education **II** semester **III**

Faculty **Architectural**

Group M118i

Load: lectures **60** hours, individual work 180 hours. Total 240 hours.

Credits: **8**

Room: № _____

Time: _____

2. Information on lecturer:

Name and title: **Hajiyeva S.Kh., ScD in architecture, professor**

Address of the department: **AzUAC, III building, 2 floor**

Consultation hours: _____

E-mail: sabiks13@yahoo.com

Department: **5387409**

3. Necessary books and manuals:

1. **History of Azerbaijan architecture in 5 volumes**, "Sharq-Qarb" (East-West) Publishing House, 20132012
2. **Усейнов М., Бретаницкий Л.С., Саламзаде А.В.** История архитектуры Азербайджана.- М.,Изд-во лит-ры по стр-ву, арх-ре и строит. Материалам, 1963.-396с.
3. **Ахундов Д.А.** Архитектура древнего и раннесредневекового Азербайджана, -Баку, Азербайджанское Государственное Издательство, 1986-311с.
4. **Бабаев И.А.** Города Кавказской Албании. Баку, 1990.

Additional literature:

4. **Керимов В.I** Оборонительные сооружения Азербайджана. Баку, 1998.
5. **Мамедова Г.Г.** Культовое зодчество Кавказской Албании.-Баку, «Элм»,1997.-248с. с
6. **Гийаси Ъ.**- Низами дюврц мемарлыг абидяляри- Бакы, «ишыг», 1991, 262 с.
1. **Гаджиева С.Х.** Взаимовлияние архитектуры христианских и мусульманских культовых сооружений средневекового Азербайджана- диссертация на соискание степени кандидата архитектуры- Баку- 1998
2. **Геюшев Р.Б., Халилов М.Дж.** Каменные изваяния раннесредневековой Албании.-Баку, «Элм», 1986.
3. **Карахмедова А.А.** Христианские памятники Кавказской Албании.- Баку, «Элм»,1986.
4. **Мамедзаде К.М.** Строительное искусство Азербайджана.- Баку, «Элм», 1983-336с.

4. Description and the goals of the discipline:

PURPOSE OF THE COURSE « Typology of Azerbaijan architectural monuments **»** is to introduce to the students the main types of architecture of Azerbaijan. The course includes the process of the birth of the first buildings, their improvement over time up to the developed of the different multifunctional facilities. The range includes monuments of antique period and monuments of pre-Islamic period as well. We also investigate the architecture of the initial period of the spread of Islam in Azerbaijan.

The course includes three chapters:

1. Architecture of fortifications
2. Religious architecture
3. Civil architecture

OBJECTIVES OF THE COURSE:

To familiarize students with the basic provisions of this scientific discipline.

• To familiarize students with the basic directions of development of Azerbaijan's architecture, to identify the main stages of the historical development of the architecture of the country;

• To explain the limitations of the process of formation the basic types of structures on the territory of historic Azerbaijan; to reveal the continuity in the formation of architectural structures, to determine patterns in the development of monuments;

• To give the main characteristics of the different schools of architecture;

• To teach to the students the skills of scientific inquiry of monuments" conditions, level of their preservation

In the first part “Architecture of fortifications” students should study the ways of appearance of the defensive architecture, their development? Architectural- planning peculiarities and main building materials.
The second part “Religious architecture” is to study the large part of the architectural heritage of monumental religious buildings reflecting the development of the art of architecture and construction are taught the most valuable monuments. Religious architectural monuments as well as the most valuable works of art have been applied.

Explore the features of religious architecture, which existed before Islam and Mazdaism, Mitraism, Zoroastrianism and Christianity architecture is of great importance for study of relations defining their role in the region's architecture.

Enabling the architecture to detect specific and unique features such as composition, methods of design and construction techniques of the solution has a great value in the study of mosques, madrasahs, fair temples, one-nave and three-nave basilicas, circular, center- domed temples, monasteries and architectural complexes.

Part III – dedicated to the study of civil buildings in the territory of Azerbaijan, caravanserais, baths, bridges and so on. They are under investigation from architecture - composition solution, construction and construction materials, and their regional characteristics points of view.

3. ROLE OF THE COURSE IN THE TRAINING OF STUDENTS

The objectives of the course is to familiarize students with the history of the ancient architecture of Azerbaijan, which is the first step in teaching students the history of architecture. That is why the importance of this course is increase, acquaintance with it paves the way for further study of the history of architecture of Azerbaijan in subsequent periods. In addition, interaction of Azerbaijan architecture and architecture of other countries in the region take the place during the course, as well as the place of architecture of Azerbaijan studied in the development of architecture in the region. This creates a good base for exploring the architecture of Azerbaijan in the global context.

SECTIONS OF THE COURSE.

The course consists of one section which consists of **lectures** (90 hours) 9. Student must fulfill a essay on topics of lectures.

5. The planned schedule of the subject:

5.1. Topics and summary of lectures

Weeks	Topics and summary of lectures	Hours	Date
1	2	3	4
1	**THEME 1.Historical bases of appearance of the defensive buildings. The role of the defense architecture in the development of the further towers and towns.** The great importance of the fortifications of in the history of architecture. The favorable climate and fertile soils, geography, natural resources; and a strategic position between East and West, South and North and the presence of international trade routes, socio - economic and cultural development affected on the architectural development. Defensive architecture in	**4 HOURS**	

	Neolithic settlements, bronze and iron ages. First appearance of new fortifications. The above-mentioned factors influenced on to creation of better conditions in various settlements, castles and cities. Defensive architecture as architecture that played a major role in organizing the safe life thanks to the strategic placement of buildings in the areas of defense. The simple structures of the medieval period, the transition period until the formation of a sophisticated urban structures.		
2	**THEME 2. Azerbaijan's major cities and capitals. The cities and their architecture - planning features.** The creation of the largest cities as a result of country's centuries-old social -economic development. Albanian rulers in the fifth century, the capital city of Gabala. Huns and other nomadic tribes of the fifth century, after the change of capital from Gabala to Partav (Barda). Demolition of Barda in the result of the wars (1048 - 1066 - years). The rapid development of Ganja. Shirvanshakhs residence in Shamakhi as new capital town of Shirvanshakhs among the cities of the northern region. The originality and economic development of Azerbaijani towns such as Tabriz, Nakhchivan and Beylagan, Shamkir and other big towns. The history of architecture as an area of great interest for the study of cities. Great importance of fortifications study in the study of the history of architecture. Medieval towns and castles, their planning structure with variety of solutions. Composition of the consolidated plan and the settlement of cities and natural landscape of the area to be used under maximum protection. Forms of fortified castles and cities in accordance with concrete natural conditions, the formation of a new urban art principles and famous architects. Establishment of schools of defense architecture.	**4HOURS**	
3	**THEME 3. The architecture of the castle** Unlike the fortified cities and residential areas, distinguished by its strength as a way of defending the nation's feudal castle and castles. Bum Gevur– qala castle, Bayramkoy and Kungud castles, Geldek Gevur towers. Their connection not only to requirements of the defense during the construction process, as well as their subordination to the economic requirements. Absheron towers.	**4 hours**	
4	**THEME 4. Classification and typology of defensive buildings.** Study of the Defense buildings, some features and building materials. Typology of the Defense buildings. There differentiation depending on planning structures on: circular, elliptical, square, rectangular, trapezium form and polygons.	**4 HOURS**	
5	**THEME 5. Ancient religious buildings. Christian architecture of Caucasian Albania. One-nave basilicas. Three-nave basilicas.** The first buildings of the prehistoric primitive communal man (cave settlements). Azikh cave, Gobustan. Megalitic structures: dolmens (Lankaran region), menhirs (Gobustan, Gazakh region), cromlechs (Mardakyan, Shuvelan, Gobustan.) Historical preconditions of the ancient buildings appearence.	**4 HOURS**	

	Worship and public facilities in the ancient period. Cult-public building in Gabala, its layout and the building materials. Reconstruction by D.Ahundov. Palace in Sary-Tepe (Gazakh district). Religious buildings in Mingechevir. Religious buildings (Zoroastrian). The planning- compositional structure of fire temples. Building materials of antique period.Historical information on the adoption of Christianity in Caucasian Albania. Construction activities of the Albanian state (Urnayr III, Vachagan, Djavanshir). Buildings of the initial period of Christianity. The temple in Kish. Hall-vaulted churches in Mingechevi**r,** Gyavurgala (Agdam) Khudavank; basilica in Qum, Agoglanchay (Lachin), Barda, Tazakend. Their planning-compositional peculiarities, construction solutions.		
6	**THEME 6. DOME RELIGIOUS ARCHITECTURE.** Dome basilicas (7 kilse- 7 churches monastery). Temples of freecross (Gabizdara, Gedabey). Cross-domed churches (7 kilse). Round temples. Kilsadag (near the village of Boyuk Emily in Gabala region), Mamrukh (on the border of Zagatala and Gakh regions), Lekit (Qakh region). Their uniqueness, features and architectural solutions. Their role in the development of the architecture of the region. Temple Mohranisa. Other tetra conchs of the Caucasus and their relationship with Lekit temple. High development of religious architecture in the first period of prosperity of Albanian architecture (VI-VII centuries). The emergence and development of hall- vaulted structural system on four pillars (V-VII centuries). Historical background. The spread of Islam in Azerbaijan. The existence of Christianity in many territories of Azerbaijan for centuries and continued construction of Christian places of worship.	**4 HOURS**	
7	**THEME 7. ARCHITECTURE OF THE ALBANIAN MONASTERY COMPLEX.** The first monastic complexes, their origin and development. 7 kilse, St. Elisha, Lekit complexes and etc. Planning-compositional structure of the monasteries. Great Aran, Khudavang, Gyandjasar, Khatiravank, Gyzylvank, Khamshivank and other monastic complexes. Architecture of the temples in monasteries. Examples of the most common cross-domed churches (Goshavank Gyandjasar, Arzu Khatun). Three-naved domed basilicas (Gyzylvank, Khamshivank, Khatiravank).	**4 HOURS**	
8	**THEME 8. ISLAMIC RELIGIOUS ARCHITECTURE OF THE INITIAL PERIOD** The emergence of the first mosques. Restructuring of the Christian and Zoroastrian structures into mosques. The main planning features of mosques and their typology. Compositional techniques. Types of mosques: -hall-type, multy-halls (Derbend, Shamakhi,Marand) -Complicated plan (Baku Djuma mosque, Asagi mosque in Shusha) With eyvans (Djuma mosque in Ardebil, Tuba- shakhi in Mardakyan etc.) Architectural schools in Islamic architecture- Tabriz, Shirvan, Nakhchivan, Aran, Garabakh. Quarter and Djuma mosques. Problems of mosques restoration and adaptation.	**4 HOURS**	

9	**THEME 9. ISLAMIC COMPLEXES KHANEGAH.** MINARETS. The impact of the ideological basis for the construction and planning features. Civil architecture.	**4 HOURS**	
10	**THEME 10. THE MEMORIAL ARCHITECTURE. MAUSOLEUMS.** The main architecture - compositional types of mausoleums-tombs: round, square, eight and multifaceted. Pyramidal tombs. Tombs prototypes of Christian and pre-Christian era: Khachin - Darbatli (XIV, Agdam). Mausoleums of Nakhchivan , Aran Qarabag, Shirvan, Tabriz schools.	**4** HOURS	
11	**THEME 11. APPEARANCE OF THE CIVIL ARCHITECTURE** Civil architecture preserved up to now. Their division into different groups. Features opf the civil architecture. Compositional structures, types, regional peculiarities etc. High construction techniques of the bridges. Bridge architecture structural composition . Small and large -span bridges. The role of trade bridges. " Silk Road " as a positive factor in the development of the bridges (bridges of Khudaferin, in Barda, etc.).	**4HOURS**	
12	**THEME 12. CIVIL ARCHITECTURE. CARAVANSERAIS.** Caravanserai architecture, their compositional structure. City caravanserai (Baku, Sheki, Shusha, Shamakhi, Barda, etc.). Caravanserais constructed on the roads (South Azerbaijan, Garghabazar, Miajik, Nardaran, etc.). Composition - planning and volumetrically features of caravanserai built incccities and on the roads. Different aspects of their spatial solutions. Entrances. Principles of the inner courtyard organizing in Caravansaries - Balakhana, mahtaaba, pool. Changing the direction of trade routes - as a factor of disintegration of the caravanserai.	**4 HOURS**	
13	**THEME 13. CIVIL ARCHITECTURE RESERVOIRS (OVDAN)AND ICE-HOUSES (BUZKHANA).** Reservoirs and ice-houses history- architectural importance of such buildings. Their architecture: composition, structure, functions. Constructive solutions: size, construction techniques. Area of development of Reservoirs and ice-houses. Reservoirs and ice-houses in Absheron.	**4 HOURS**	
14	**THEME 14. Baths.** Bathhouses' role in shaping the image of the architecture of cities. Bathhouses and their features: sanitary - hygiene, rest, performance of the religious rituals, wedding ceremonies and others. In some cases, baths sporting events - "Zorxanalar" (in Baku, Shamakhi, Sheki, Ganja, Shusha, etc.). Bathhouses architecture - composition analysis. Comparison with bathes in Turkey, Central Asia and the Middle East, as well as ancient Roman baths "terma". Bathhouses in the areas of distribution, regional characteristics	**4 HOURS**	

	(Shirvan - Absheron, Ganja, Sheki, Nakhchivan, etc.).		
15	**THEME 15. Monuments and their interaction with the neighboring countries.** Azerbaijan, as a country rich of building materials. Equal distribution of the natural materials in different regions of the country fro the point of their influence on architecture development. Variety of the building materials: local lime-stone, adobe and burnt brick, river stone, wood, metal and different components such as gyaj, clay, Azerbaijan as an area where meet cultural relations between the peoples of East and West. The great role of these relations in the development of the monuments built in the historical - geographical region. Formation of new architectural forms as result of interaction effect.	**4 HOURS**	

5.2. Topics of essay

Number	Theme
1.	Architecture of the 12-th century and creativity of famouse Azerbaijani architect Adjemi
2.	Architectural monuments of the 15-th century
3.	Architectural schools in Azerbaijani architecture
4.	Architectural complex in Ardabil
5.	Shirvanshakhs' Palace
6.	Early mosques in Azerbaijani architecture
7.	Towers and fortifications of the 11-15th centuries
8.	Memorial architecture of Azerbaijan
9.	Monasteries
10.	Development of the mosques in Azerbaijani architecture

6. Requirements for attendance.

The maximum number of points for attendance is 10 points. In the case of students' attending all classes during the semester, he gets 10 points. Every 10 % of the total number of missed classes result in the loss of 1 point. In the case of exceeding the allowable limit of missed classes the student is not allowed to attend the exam. Special desicion should be decided on his further fate.

7. Assessment of student knowledge

The maximum number of points for knowledge is 100. 50 of them student gaining during the semester, 50 - on the exam. Scored during the semester 50 points included: 10 points per visiting, 10 points for additional work, 30 points for the results of laboratory classes or seminars. If the discipline has course work (project), then 20 points are awarded for the results of seminar or laboratory studies and 10 - for the implementation of the course work (project).

During the examination student must score at least 17 points. In the case of more than 25% of missed classes, the student is not allowed to exam.

According to the European Credit System for the results of points accumulated for the semester, the student is evaluated as follows:

Less than 51 points	–	«non satisfactory»	– F
51 - 60 points	–	«acceptably»	– E
61 - 70 points	–	"satisfactory"	– D
71 - 80 points	–	«good»	– C
81 - 90 points	–	"very good"	– B
91 - 100 points	–	"best"	– A

8. Violation of the rules of conduct. In case of violation by the student the code of conduct provided by the University it can be applied activities under the Regulations

9. Requirements for the level of the course content familiarization:

At the end of the course the student should:

• know the history of architecture of ancient Azerbaijan and formation of the restoration and architectural science, to be familiar with the basic stages of development of the architecture of Azerbaijan;

• have a clear idea of the new scientific discipline

10. Study the opinion of students about the subject

After completing the course we will interview the students for clarifying their relation to the subject, separate topics, complexity of the individual works etc.

_____
_____
_____
_____
_____
_____

Lecturer: Sabina Hajiyeva ( )

"____"_____ 20.