

UNIVERSITY OF THE PUNJAB

NOTIFICATION

It is hereby notified that the Syndicate at its meeting held on 15.11.2021 approved the recommendations of the Academic Council made at its meeting dated 27.10.2020 regarding grant of permission to start BS (4 years) Program in Archaeology alongwith approval of its Syllabus with effect from the Academic Session 2020.

The Syllabus of BS Archaeology is Attached vide Annexure- 'A'.

**Admin. Block,
Quaid-i-Azam Campus,
Lahore.
No. D/122/Acad.**

**Sd/-
Muhammad Rauf Nawaz
Registrar**

Dated: 10.01/2022.

Copy of the above is forwarded to the following for information and necessary action: -

1. Dean, Faculty of Arts & Humanities.
2. Chairman, Department of Archaeology
3. Controller of Examinations
4. Director, Quality Enhancement Cell
5. Director, IT
6. Secretary to the Vice-Chancellor
7. PS to PVC
8. PS to Registrar
9. Assistant Syllabus



**Assistant Registrar (Academic)
for Registrar**

Annexure-VI

**Department of Archaeology, University of the Punjab
Courses and Syllabi of BS Archaeology w.e.f. 2021**

Program Title: BS Archaeology

Duration: Four Years

Semester: 8

Course Load per Semester: 15-18 Cr hr.

Total Credit Hours: 133

Eligibility: FA/FSC/ICS or equivalent

Number of Seats: 33 (Open Merit 25, Reserved 8)

Structure (As per HEC curriculum)

Sr. No.	Categories	No. of courses	Credit Hours
		Min – Max	Min – Max
1.	Compulsory Courses	9 – 9	25 – 25
2.	General Courses to be chosen from other disciplines	7 – 8	21 – 24
3.	Discipline Specific Foundation Courses	9 – 10	30 – 33
4.	Major Courses including research project / Internship	11 – 13	36 – 42
5.	Electives within the major	4 – 4	12 – 12
	Total	40 – 44	124 – 136

Structure (Adopted by Department of Archaeology, University of the Punjab)

Sr. No.	Categories	No. of courses	Credit Hours
			Min – Max
1.	Compulsory Courses	9	25
2.	General Courses to be chosen from other disciplines	7	21
3.	Discipline Specific Foundation Courses	10	33
4.	Major Courses including research project / Internship	13	42
5.	Electives within the major	4	12
	Total	43	133

LAYOUT (According to HEC approved Curriculum)

Compulsory Course

No of Courses: 9

Credit hours: 25

1. ENGLISH I	3CH
2. ENGLISH II	3CH
3. ENGLISH III	3CH
4. ENGLISH IV	3CH
5. PAKISTAN STUDIES	2CH
6. ISLAMIC STUDIES / ETHICS	2CH
7. MATHEMATICS	3CH
8. INTRODUCTION TO STATISTICS	3CH
9. INTRODUCTION TO COMPUTER SCIENCE	3CH

General Courses to be chosen from other Disciplines

No of Courses: 7

Credit Hours: 21

1. Fundamentals of Geography	3CH
2. Introduction to History	3CH
3. Introduction to Philosophy	3CH
4. Introduction to Anthropology	3CH
5. Introduction to Persian	3CH
6. Introduction to Political Science	3CH
7. Basic Geology	3CH

Discipline Specific Foundation Courses

No of Courses: 10
Credit Hours: 33

1. Introduction to Archaeology	3CH
2. Ancient History of South Asia	3CH
3. Archaeological Heritage of Pakistan	3CH
4. Pre History of Pakistan	3CH
5. Proto History of Pakistan	3CH
6. Ancient Religions of Pakistan and India	3CH
7. Principles of Archaeology	3CH
8. Museology	3CH
9. Archaeological Tourism in Pakistan	3CH
10. Muslim History of South Asia	3CH

Major courses including research project/internship/Thesis

No of Courses: 13
Credit Hours: 42

1. Ancient world Civilizations-I (Mesopotamia, Egypt and Persia)	3CH
2. Environmental Archaeology	3CH
3. Ancient Art and Architecture of South Asia	3CH
4. Ancient world Civilizations-II (China, Greece and Rome)	3CH
5. Early Muslim Art and Architecture	3CH
6. Indian Paleography and Epigraphy	3CH
7. Numismatics of Pakistan and India-I (Pre Muslim Period)	3CH
8. Research Methodology	3CH
9. Numismatics of Pakistan and India-II (Muslim Period)	3CH
10. Preliminary Sanskrit	3CH
11. Muslim Architecture of Pakistan and India	3CH
12. Sikh and Colonial Heritage of Punjab	3CH
13. Thesis	6CH

Elective Courses within the major

No of Courses: 4
Credit Hours: 12

1. Jaina Heritage of Pakistan	3CH
2. Archaeological Conservation	3CH
3. Study of Archives	3CH
4. Heritage Management	3CH

SCHEME OF STUDIES FOR 4-YEAR INTEGRATED BS ARCHAEOLOGY

Semester-I

Course Code	Name of Subject	Credit Hours
ENG/111	English-I	3
PS/112	Pakistan Studies	2
MATH/113	Mathematics	3
GEO/114	GENERAL-I: Fundamentals of Geography	3
HIS/115	GENERAL-II: Introduction to History	3
ARCH/116	FOUNDATION-I: Introduction to Archaeology	3
	Total Credit Hours	17

Semester-II

Course Code	Name of Subject	Credit Hours
ENG/121	English-II	3
ISL/122	Islamic Studies / ET/ 123: Ethics	2
STAT/124	Introduction to Statistics	3
PHIL/ 125	GENERAL-III: Introduction to Philosophy	3
ANTH/ 127	GENERAL-IV: Introduction to Anthropology	3
ARCH/ 127	FOUNDATION-II: Ancient History of Pakistan and India	3
	Total Credit Hours	17

Semester-III

Course Code	Name of Subject	Credit Hours
ENG/211	English-III	3
COMP/212	Introduction to Computer Science	3
PER/213	GENERAL-V: Introduction to Persian	3
POL/214	GENEAL-VI: Introduction to Political Science	3
ARCH/215	FOUNDATION-III: Archaeological Heritage of Pakistan	3
ARCH/216	FOUNDATION-IV: Pre History of Pakistan	3
	Total Credit Hours	18

Semester-IV

Course Code	Name of Subject	Credit Hours
ENG/221	English-IV	3
GEOG/222	GENERAL-VIII: Basic Geology	3
ARCH/223	FOUNDATION-V: Proto History of Pakistan	3
ARCH/224	FOUNDATION-VI: Ancient Religions of Pakistan and India	3
ARCH/225	FOUNDATION-VII: Principles of Archaeology	3
ARCH/226	FOUNDATION-VIII: Museology	3
	Total Credit Hours	18

Semester-V

Course Code	Name of Subject	Credit Hours
ARCH/311	FOUNDATION-IX: Archaeological Tourism in Pakistan	3
ARCH/312	FOUNDATION-X: Muslim History of South Asia	3
ARCH/313	MAJOR-I: Ancient World Civilizations-I (Mesopotamia, Egypt, Persia)	3
ARCH/314	MAJOR-II: Environmental Archaeology	3
ARCH/315	MAJOR-III: Ancient Art and Architecture of South Asia	3
	Total Credit Hours	15

Semester-VI

Course Code	Name of Subject	Credit Hours
ARCH/321	MAJOR-IV: Ancient World Civilizations-II (China, Greece, Rome)	3
ARCH/322	MAJOR-V: Indian Paleography and Epigraphy	3
ARCH/323	MAJOR-VI: Numismatics of Pakistan and India-I (Pre Muslim Period)	3
ARCH/324	MAJOR-VII: Early Muslim Art and Architecture	3
ARCH/325	MAJOR-VIII: Research Methodology	3
	Total Credit Hours	15

Semester-VII

Course Code	Name of Subject	Credit Hours
ARCH/411	MAJOR-IX: Numismatics of Pakistan and India-II (Muslim Period	3
ARCH/412	MAJOR- X: Preliminary Sanskrit	3
ARCH/413	MAJOR-XI: Muslim Architecture of Pakistan and India	3
ARCH/414	ELECTIVE-I (within MAJOR): Jaina Heritage of Pakistan	3
ARCH/415	ELECTIVE-II (within MAJOR): Archaeological Conservation	3
	Total Credit Hours	15

Semester-VIII

Course Code	Name of Subject	Credit Hours
ARCH/421	MAJOR-XII: Sikh and Colonial Heritage of Punjab	3
ARCH/422	ELECTIVE-III (within MAJOR): Study of Archives	3
ARCH/423	ELECTIVE-IV (within MAJOR): Heritage Management	3
ARCH/424	Major-XIII: Thesis	6
	Total Credit Hours	15

Total Credit Hours: 133

Course Outlines for BS Archaeology Courses

Semester-I

Course Code	Name of Subject	Credit Hours
ENG/111	English-I	3
PS/112	Pakistan Studies	2
MATH/113	Mathematics	3
GEO/114	GENERAL-I: Fundamentals of Geography	3
HIS/115	GENERAL-II: Introduction to History	3
ARCH/116	FOUNDATION-I: Introduction to Archaeology	3
	Total Credit Hours	17

ENG/111: English I (Functional English)

Type: Compulsory

Credit Hours: 3

Pre-requisites: None

Objectives

- To enhance language skills and develop critical thinking.

Course Contents

Basics of Grammar

Parts of speech and use of articles

Sentence structure, active and passive voice

Practice in unified sentence

Analysis of phrase, clause and sentence structure

Transitive and intransitive verbs

Punctuation and spelling

Comprehension

Answers to questions on a given text

Discussion

General topics and every-day conversation (topics for discussion to be at the discretion of the teacher keeping in view the level of students)

Listening

To be improved by showing documentaries/films carefully selected by subject teachers

Translation skills**Urdu to English****Paragraph writing**

Topics to be chosen at the discretion of the teacher

Presentation skills

Introduction

Note: Extensive reading is required for vocabulary building

Recommended Books**1. Functional English****a) Grammar**

- Practical English Grammar by A. J. Thomson and A. V. Martinet. Exercises 1. Third edition. Oxford University Press. 1997. ISBN 0194313492
- Practical English Grammar by A. J. Thomson and A. V. Martinet. Exercises 2. Third edition. Oxford University Press. 1997. ISBN 0194313506

b) Writing

- Writing. Intermediate by Marie-Christine Boutin, Suzanne Brinand and Françoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 0 19 435405 7 Pages 20-27 and 35-41.

c) Reading/Comprehension

- Reading. Upper Intermediate. Brian Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 19 453402 2.

PS/112: Pakistan Studies

Type: Compulsory

Credit Hours: 2

Pre-requisites: None

Introduction

This course will equip the students with some basic study of Pakistan with both historical and thematic way. It will provide the background of Pakistan and explains the geography, culture, constitutions, agriculture and industrial sector, foreign policy, international organizations, and relations with the Muslim World.

Objectives

- To develop vision of historical perspective, government, politics, contemporary Pakistan, ideological background of Pakistan.
- To study the process of governance, national development, issues arising in the modern age and posing challenges to Pakistan.

Course Contents

1. Historical Perspective

- a. Ideological rationale with special reference to Sir Syed Ahmed Khan, Allama Muhammad Iqbal and Quaid-e-Azam Muhammad Ali Jinnah.
- b. Factors leading to Muslim separatism
- c. People and Land
 - i. Indus Civilization
 - ii. Muslim advent
 - iii. Location and geo-physical features.

2. Government and Politics in Pakistan

Political and constitutional phases:

- a. 1947-58
- b. 1958-71
- c. 1971-77
- d. 1977-88
- e. 1988-99
- f. 1999 onward

3. Contemporary Pakistan

- a. Economic institutions and issues
- b. Society and social structure
- c. Ethnicity
- d. Foreign policy of Pakistan and challenges
- e. Futuristic outlook of Pakistan

Learning Outcome

After completing the course, students will enable to understand Pakistan.

Recommended Readings

- Burki, Shahid Javed. (1980). *State & Society in Pakistan*, The Macmillan Press Ltd.
- Akbar, S. Zaidi. (2000). *Issue in Pakistan's Economy*. Karachi: Oxford University Press.
- S. M. Burke and Lawrence Ziring. (1993). *Pakistan's Foreign policy: An Historical Analysis*. Karachi: Oxford University Press.
- Mehmood, Safdar. (1994). *Pakistan Political Roots & Development*. Lahore, 1994.
- Wilcox, Wayne. (1972). *The Emergence of Bangladesh.*, Washington: American Enterprise, Institute of Public Policy Research.
- Mehmood, Safdar. *Pakistan Kayyun Toota*, Lahore: Idara-e-Saqafat-e-Islamia, Club Road, nd.
- Amin, Tahir. (1995). *Ethno - National Movement in Pakistan*, Islamabad: Institute of Policy Studies, Islamabad.
- Ziring, Lawrence. (1980). *Enigma of Political Development*. Kent England: WmDawson & sons Ltd,
- Zahid, Ansar. (1980). *History & Culture of Sindh*. Karachi: Royal Book Company.
- Afzal, M. Rafique. *Political Parties in Pakistan*, Vol. I, II & III. Islamabad: National Institute of Historical and cultural Research, 1998.
- Aziz, K. K. (1976). *Party, Politics in Pakistan*, Islamabad: National Commission on Historical and Cultural Research..
- Muhammad Waseem. (1987). *Pakistan Under Martial Law*. Lahore: Vanguard.
- Haq, Noorul. (1993). *Making of Pakistan: The Military Perspective*. Islamabad: National Commission on Historical and Cultural Research.

MATH/113: MATHEMATICS

Type: Compulsory

Credit Hours: 3

Pre-requisites: None

Introduction

This course introduces the basic topics and techniques of mathematics, including logic, set theory, counting techniques, recurrence relations, and topics from graph theory.

Objectives

- Students should be able to distinguish between the notion of discrete and continuous mathematical structures.
- Students should be able to demonstrate an understanding of the basic concepts of set theory and apply fundamental counting algorithms to solve applied problems, particularly those found in the area of computer science.
- An understanding should be developed to prove mathematical statements by means of inductive reasoning.

Course Contents

1. Introduction to Mathematical Logic

- Basic definitions and notation
- Appropriate use of quantifiers
- Tautologies and contradictions

2. Sets

- Notation, operations and relations
- Finite and infinite sets
- Principle of Inclusion & Exclusion

C. Relations and Functions

- Basic definitions and properties
- Binary relations
- Equivalence relations and partitions

D. Mathematical Induction

- The Well Ordering Principle
- Proof by mathematical induction

E. Recursion

- Recursively defined sequences

- Linear recurrence relations with constant coefficients

F. Algorithms

- Basic concept of algorithms
- Analysis of algorithms
- Euclidean algorithm
- Searching and sorting
- Algorithms

G. Counting Techniques

- Fundamental counting techniques
- Permutations and combinations
- The Pigeonhole Principle
- Binomial coefficients and Pascal's Triangle
- Introduction to generating functions

H. Graph Theory

- Fundamental concepts of graphs and subgraphs
- Weighted graphs
- Paths and circuits
- Euler and Hamiltonian paths and circuits
- Planar graphs
- Graph coloring

I. Trees

- Basic definitions and properties of trees
- Spanning trees
- Weighted trees

Recommended Books

- Rosen, Kenneth H. (2011). *Discrete Mathematics and Its Applications*. New York: McGraw-Hill.
- Liu, Chung Laung. (1987). *Elements of Discrete Mathematics*. McGraw-Hill Education.

GEO/114: Fundamentals of Geography

Type: General

Credit Hours: 3

Pre-requisites: None

Objective

- To expose students with the founding principles of Geography and geographical knowledge.

Course Contents

1. Introduction

- Definitions, scope and branch of Geography
- Roots of the discipline and basic geographic concepts
- Themes and traditions of Geography
- Tools of Geography

2. The Universe

- Galaxies and solar system

3. The Earth as a planet

- Celestial positions, its shape and size
- Rotation, revolution and related phenomenon

4. Spheres of the earth

- Lithosphere
- Atmosphere
- Hydrosphere
- Biosphere

5. Man-environment interaction

- Population
- Major Economic activities
- Settlements
- Pollution

Recommended Readings

- Arbogast, A. F. (2007). *Discovering Physical Geography*, John Wiley and Sons, London.
- Christopherson, R. W. (2009) *Geo systems: An introduction to Physical Geography*, Pearson Prentice Hall, New Jersey.
- De Blij, H. J and Muller, P. O. (1996) *Physical Geography of the Global Environment*, USA, John Wiley and sons Inc., New Jersey.

- Guinness, J. P. & Nagle, G. (2011) Geography, Hodder Education, London. King, C. (1980) Physical Geography, Basil Blackwell, Oxford
- Miller, G. T. (2008) Living in the Environment, Principles, connections and Solutions, Wadsworth, USA.
- Monkhouse, F. J. (1996) Principles of Physical Geography, Hodder & Stoughton, London.
- Scott, R. C. (1996) Introduction to physical geography, West Publishing Co, New York.
- Small, R. J. (1989) Geomorphology and Hydrology, Longman, London.
- Strahler, A. (2013) Introduction to Physical Geography, John Wiley & Sons, New Jersey.
- Stringer, E. T. (2004) Modern Physical Geography, John Wiley, New York.
- Taylor, J. (1993) Integral Physical Geography, Longman, London.
- Thompson, R. D. (1986) Process in Physical Geography, Longman, London.
- Thornbury, W. D. (2004) Principles of Geomorphology, John Willy & Sons, New York
- Thurman, H. V. & Trujillo, A. P. (2013) Essentials of Oceanography, Prentice Hall Inc., USA.

HIS/115: Introduction to History

Type: General

Credit Hours: 3

Pre-requisites: None

Introduction

This is an introductory course. Its main purpose is familiarize the students with basic issues of historical discipline: what history is all about, how it is written; and its relationship with other disciplines.

Course Contents

- History: Concept and Meaning
- Nature and scope of History
- Benefits of History: History as a corrective force; History as a repetitive force
- Branches of History (political, cultural, social, economic)
- Relationship of History with other social sciences
- Causation and Objectivity
- Classification of History: Narrative History, Scientific History, Philosophy of History, Future History
- Archives and Historical documents

Learning Outcomes

After studying this course, the students should be able to

- Comprehend the concept and potential value of historical studies
- Understand the relationship of history with other discipline
- Develop an insight into the discourses on history

Recommended Readings

- Bernard Cohn. (1988). *An Anthropologist among Historians and Other Essay*,.Oxford University Press.
- Caroline Steedman. (2002). *Dust: The Archive and Cultural History*. Manchester University Press.
- Carlo, Ginzburg. (1992). *Clues, Myths, and the Historical Method*. John Hopkins: University Press.
- Carr, E. H., (1961). *What is History? Harmondsworth*: Penguin..
- Collingwood, R. G. (1978). *The Idea of History*. Oxford: Oxford University Press.

- G. W. G. Hegel. (1991). *Elements of the Philosophy of Right*. Cambridge University Press.
- Gertrude Himmelfarb. (1987). *The New History and the Old*. Cambridge: Harvard University Press.
- Govransk. (1969). *History Meaning and Methods*. USA.
- Qureshi, Muhammad Aslam. (2000). *A Study of Historiography*. Lahore: Pakistan Book Centre, Latest Edition.
- Peter Burke. (1977). *Varieties of Cultural History*, Cornell University Press.
- Ranjit Guha. (2010). *The Small Voice of History*. Delhi: Permanent Black.
- Stern Fritz. (1975). *Varieties of History: from Voltaire to the Present*. Vintage.

Arch/ 116: Introduction to Archaeology

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Introduction

This course will introduce students briefly the fundamentals of Archaeology and provide an introductory overview of the emergence of archaeology as discipline. Archaeology basically reconstructs the human past by studying, analysing and examining material culture. The aim of Archaeology is the understanding of humankind as it is a humanistic discipline, a humane study.

Objectives

- To enable students to learn about scope and significance of Archaeology.
- To familiarize students the scientific aspect of archaeology.
- To introduce students the techniques of survey, exploration and excavations.

Course Contents

- Definition and terminology of Archaeology
- Aims and objectives of Archaeology
- Brief history and development of Archaeology
- Relation of Archaeology with History, Anthropology, Geography, Geology, Zoology, Botany, Physics and Chemistry
- History of Archaeology
- Basic Concept of Archaeology: artefacts, stratigraphy, archaeological sites, settlement-pattern, context
- Survey in Archaeology
- Excavation techniques
- Chronology
- Conservation

PRACTICAL

- Visit to local sites and museums
- Systematic surface collection
- Photographic documentation of archaeological sites
- Study of regional maps

- Location of sites/monuments on the maps
- Identification of key features of different periods

Learning Outcome

After completing this course, the student will get familiarized with basic concepts and techniques of Archaeology

Recommend Readings

- Agrawal, D. P. Ghosh, A. (eds). (1973). *Radiocarbon and Indian Archaeology*. Bombay.
- Aitkin, M. J. (1990). *Science-based Dating in Archaeology*. Longman, London.
- Bowman, S. G. E. (1990). *Radiocarbon Dating*. London: British Museum Publication.
- Fagan, B.M. (1991). *In the Beginning: An Introduction to Archaeology*. Harper Collins.
- Hole, F. and Heizer, R.F. (1977). *Prehistoric Archaeology: A Brief Introduction*. New York.
- Joukowsky, M. (1980). *A Complete Manual of Field Archaeology*. USA.
- Renfrew, C. and Bahn, P. (1991). *Archaeology: Theories, Methods and Practice*. London: Thames and Hudson.

Semester-II

Course Code	Name of Subject	Credit Hours
ENG/121	English-II	3
ISL/122	Islamic Studies / ETH/123: Ethics	2
STAT/124	Introduction to Statistics	3
PHIL/125	GENERAL-III: Introduction to Philosophy	3
ANTH/126	GENERAL-IV: Introduction to Anthropology	3
ARCH/127	FOUNDATION-II: Ancient History of South Asia	3
	Total Credit Hours	17

ENG/121: English II Academic Reading and Writing)

Type: Compulsory

Credit Hours: 3

Pre-requisites: English-1

Contents

Basics of Grammar II

Recommended Reading:

Eastwood, John. *Oxford Practice Grammar*. UK: oxford University Press, 1992.

- Unit No. 4, 5, 8, 9, 11,12, 13, 16, 18, 20, 22, 23, 24, 26, 28, 29, 30 (Tenses)
- Unit No. 128, 129, 130, 131 (Phrasal Verbs).

Reading and Critical Thinking

Recommended Reading:

Ellison, Peter and Gould, Mike. *Focus on Comprehension*. Volume 4. Singapore:

Learner's Publishing Pte, 2009.

- Section 4: Unit No. 12, 13, 14, 15. Practice Unit 3.
- Section 5: Unit No 16, 17, 18.
- Section 6: Unit No. 19. Practice Unit 4.

Paragraph Writing II

The students are required to know basics of Paragraph Writing with an emphasis on Topic sentences and Supporting sentences and a possible Concluding sentence. (Word Limit Up to 120 words)

Recommended Reading

- Arnaudet, Martin L. and Barrett, Mary Ellen. *Paragraph Development: A Guide for Students of English as a Second Language*. Prentice-Hall, Englewood Cliff, N.J. 1981. (Page 179- 185).

Study Skills

- The students are expected to be proficient in Reading Skills like Skimming, Scanning, Speed Reading and avoiding Faulty Reading Habits.

Recommended Reading

- Aziz, Nadeem. *English Language Communication Skills for B.Ed.* Pakistan: Majeed Book Publishers, (Page 139-159).

Vocabulary Building Skills

- WORD ROOT METHOD Unit 1-6. Page No. 88-103.

Recommended Reading

- Idrees, Muhammad. *Guide for GAT General Test. SMART BRAIN. GRE (General, Local)* 2010-2011 Ed.Lahore: Dogar Brother Publishers, 2010.

ISL/122: Islamic Studies

Type: Compulsory

Credit Hours: 2

Pre-requisites: None

Introduction

This course is designed to introduce students with the Islamic tradition, to encourage them to independently engage that tradition and to ascertain its relevance to the modern individual and society. Students are expected to directly engage the authors of the texts, determine what each author is trying to convey, and raise questions on the author's arguments.

Objectives

The main objectives are to give proper understanding of issues and challenges confronting the world of Islam today.

Contents

1. Difference between Din and Religion
2. Islamic Beliefs & its Impact on Individual & Society
3. Islamic Worships: Spiritual, Moral and Social Impact
4. Selected Verses from the Holy Quran
5. Human Rights & Status of Woman in Islam
6. Islamic Civilization and Culture
7. Islamic Civilization versus Western Civilization
8. Muslim World and the Contemporary Challenges
9. Ijtihad and Its Application in the Contemporary Muslim World
10. Islam and ethical Values
11. Islam and comparative study of other religions

Learning Outcome

To understand the Islamic tradition on its own terms.

Recommended Readings

- Murata, Sachiko and William C. Chittick. (1994). *The Vision of Islam*. New York: Paragon House.
- Ali, Abdullah Yusuf. (1989). *The Holy Qur'an: Text, Translation and Commentary*. Washington, DC: Amanah.
- Arberry, Arthur John. (1964). *Aspects of Islamic Civilization*. London: Allen & Unwin.
- Asad, Mohammad. (2001). *The Road to Mecca*. Louisville, KY: Fons.

- Lings, Martin. (1983). *Muhammad: His Life based on the Earliest Sources*. New York: Inner Traditions International.
- Maududi, Syed Abul Aala. (2010). *Towards Understanding Islam*. Leicester: Islamic Foundation.
- Nasr, Seyyed Hossein. (1966). *Ideals and Realities of Islam*. London: Allen & Unwin.

ETH/123: Ethics (For Non Muslims)

Type: Compulsory

Credit Hours: 2

Pre-requisites: None

Introduction

This course introduces students the basic problems in ethics, emphasizing theories of the good life, the morally good person, and morally right action, and their application to the most significant ethical questions in contemporary society, such as, social and economic justice, violence, and use of the environment.

Objectives

The main objectives of the course are to enable students to apply key concepts of ethics in moral decision-making in life.

Contents

1. Introduction: Why Morality Matters
2. Making Ethical Decisions
3. Ethical Relativism
4. Moral Objectivism
5. Value and the Quest for the Good
6. Social Contract Theory and the Motive to be Moral
7. Egoism, Self-interest and Altruism
8. Utilitarianism
9. Kant and Deontological Theories
10. Virtue Theory
11. Gender and Ethics
12. Religion and Ethics

Learning Outcomes

- To analyze a philosophical argument on a specific moral or ethical problem.
- To create a philosophical argument on a specific moral or ethical problem.

Recommended Texts

- Pojman, Louis. (2012). *Ethics: Discovering Right and Wrong*. Belmont, CA: Wadsworth.
- Rae, Scott B. (2018). *Moral Choices: An Introduction to Ethics*. 4th edition. Zondervan.

STAT/ 124: Introduction to Statistics

Type: Compulsory

Credit Hours: 3

Pre-requisites: None

Introduction

The subject of statistical science is concerned with the application of probability and modern mathematical methods to solve complex and practical problems which involve uncertainty. These uncertainties are usually associated with scientific, technological, economic, biological or environmental problems. The methodology employed draws upon mathematics and probability to establish a theoretical foundation, computing resources for handling data, and an understanding of the scientific method for meaningful application.

Contents

1. Biostatistics
2. Data mining
3. Probability
4. Regression analysis
5. Linear models
6. Survey sampling

Recommended Texts

- Walpole, Ronald E., and Carl Barnett A. (1995). *Introduction to Statistics*. Vol. 2. New York: Macmillan.

PHIL/125: Introduction to Philosophy

Type: General

Credit Hours: 3

Pre-requisites: None

Introduction

This course will introduce students the fundamentals of philosophy. It will touch upon the central questions of philosophy, such as what a philosophical question is? How the existence of God can be justified? What are the criteria of right and wrong? How society should be organised? What is reality? How science does evolve? What is mind and how it can be explained? and Whether beauty is subjective or objective? In general, these questions underpin the philosophical debates in religion, ethics, politics, metaphysics, science, mind and art.

Course Contents

1. Introduction

- What is Philosophy?
- Philosophy and its history
- Why Study Philosophy

2. Arguments for the existence of God

- The Design Argument
- The Fine-Tuning Argument
- The First Cause Argument
- The Ontological Argument
- The Argument from Miracles

3. Moral Philosophy

- What is Ethics?
- Duty-based Ethical Theories
- Religious Ethics
- Kantian Ethics

4. Political Philosophy

- What is political philosophy?
- Equality
- Democracy
- Freedom
- Punishment

- Civil Disobedience

5. Metaphysics: Appearance and Reality

- Common-sense Realism
- Representative Realism
- Idealism
- Phenomenalism
- Causal Realism

6. Philosophy of Science

- The Simple View of Scientific Method
- The Problem of Induction
- Falsificationism
- Scientism

7. Philosophy of Mind

- What is philosophy of mind?
- The Mind–Body Problem
- Physicalism
- Behaviourism
- Functionalism
- Problem of Other Minds

8. Philosophy of Art

- What is philosophy of art?
- The Family Resemblance Art Theory
- The Idealist Art Theory
- The Institutional Art Theory
- Evolutionary Art Theory
- Anti-intentional Art Theory

Recommended Readings

- Warburton, Nigel. (2013). *Philosophy: The Basics*. 5th Edition. New York: Routledge.
- Moore, Brooke Noel & Keeneth Bruder. 2013. *Philosophy: The Power of Ideas*. 9th Edition. New York: McGraw Hill.
- Warburton, Nigel. (2014). *Philosophy: The Classics*. 4th Edition. London and New York: Routledge.

ANTH/126: Introduction to Anthropology

Type: General

Credit Hours: 3

Pre-requisites: None

Objectives

- To demonstrate understanding of the scope of anthropology based on the four subfields and theoretical orientations.
- To trace the evolution of humans as a species and our relationship to living primates.
- To discuss the concept of culture and give examples of cultural development and adaptation.
- To compare across cultures similarities and differences in basic social systems to include family organization, subsistence, political systems, belief systems and expressive culture.
- To identify agents of culture, change and their effect and critique the practice of applied anthropology.

Course Content

1. Introduction to Anthropology

- Meaning and scope
- Origin and development of Anthropology
- Subfields of Anthropology
- Physical Anthropology
- Archaeology
- Linguistics
- Ethnology

2. Physical Anthropology

- Human Anatomy
- Human Physio-Morphology
- Human Evolution
- Genetics and hereditary
- Human race
- Anthropometry

3. **Archaeological Anthropology**

- Origin of man on earth
- Ecology
- Stone age culture
- Metal age

4. **Cultural Anthropology**

- Pre History to History
- Society
- Basic structure of society
- Social stratification and caste system
- Village life
- Culture
 - Development of culture
 - Origins of agriculture
 - Rise of the state
 - Concept of culture
 - Theories of culture
- Ethnology
 - Social patterns across cultures
 - Subsistence strategies
 - Political systems
 - Language
 - Belief systems
 - Expressive culture

5. **Applications of Anthropology**

- Assessing culture change
- Applied anthropology

Recommended Readings

- Ashley Montagu, M. F. (1960). *An introduction to Physical Anthropology*. Chicago.
- Banerjee, H. N. (1994). *Introducing Social and Cultural Anthropology*. Calcutta: K. K. Publications.
- Beals, R. L, & H, Hoizer. (1977). *An Introduction to Anthropology*. New York: Macmillan Publishing co.

- Bidney, D. (1953). *Theoretical Anthropology*. Columbia: Columbia University Press.
- Boas, F. (1938). *General Anthropology*. New York: Health and Co.
- Chand, S. (2003). *Anthropology: The Study of Man*. New Delhi: S. Chand and Company.
- Clark, Grahame. (1961). *World Prehistory*. London: Cambridge University Press.
- Firth, R. (1958). *Human Types: An Introduction to Social Anthropology*. New York: New American Library.
- Foster, G. M. (1969). *Applied Anthropology*. Boston: Little Brown.
- Haddon, A. C. (1945). *History of Anthropology*. London: Watt & Co.
- Howells, W. (1961). *The Emergence of Man*. New York: Random House.
- Rogers, J. J. (1993). *A History of Earth*. Cambridge: Cambridge University Press.

ARCH/127: Ancient History of South Asia

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Introduction

This course is aimed to trace the ancient history of Indian Subcontinent in a chronological framework. Sub-continent has been ruled by a number of dynasties, which contributed significant landmarks.

Objectives

- To enable students to understand about philosophy, beliefs, rituals and practices of religions.
- To familiarize students with the chronology.
- To familiarize students with the significance of history.

Course Contents

1. Geographical factors in history of Pakistan
2. Sources of ancient history
3. **Vedic Age**
 - Vedic Period
4. **Early Historic Periods**
 - Achaemenian
 - Invasion of Alexander
 - The Mauryans: Chandergupta Maurya, Bindusara and Ashoka
5. **Foreign Invasions**
 - Bactrian and Indo Greeks
 - Scythians
 - Parthians
 - Kushanas
 - Kushano-Sassanians
 - White Huns
6. **Regional Dynasties**
 - Guptas
 - Harsha Vardhana
 - TurkShahis

- Odi Shahis

Learning Outcome

- On the completion of this course, the students will be able to know about the chronology of different dynasties, their contribution in history as well as the several religious movements.

Recommended Readings

- Abdur, Rahman. (1979). *The Last Two Dynasties of the Shahis*. Islamabad.
- Basham, A. L. (1963). *The Wonder that was India*. India.
- Curring, J. Ali. (1939). *Revealing India's Past*. London.
- Liloyd, J. G. (1981). *Alexander the Great: Selections from Arrian*. Cambridge.
- Majumear, R. C. (1952). *Ancient India*. Banaras.
- Majumdar, R. C. et al. (1950). *History and Culture of the Indian People*, Vol-I, *The Vedic Age*, London. Vol-II, *The age of Imperial Unity*, Bombay.
- (1950). *An Advanced History of India*, 2nd Ed. London.
- Moreland, W. H. et al. (1936). *A Short History of India*. London.
- Qureshi, I. H., ed. (1967). *A Short History of Pakistan*. Book-1, Karachi.
- Rawlinson, G. G. (1937). *India: A short Cultural History*. London.
- Ray, H.C. (1953). *Dynastic History of Northern India*. Calcutta.
- Raychaudhuri, H. C. (1953). *Political History of Ancient India*. Calcutta.
- Sastri, S. M. ed. (1924). *Cunningham's Ancient Geography of India*. Calcutta.
- Smith, V. A. (1924). *Early History of India*. Oxford.
- Stein, A. (1998). *On Alexander's Track to the Indus*. Lahore.
- Thapar, R. A. (1966.). *History of India*. Great Britain.
- Tripathi, R. S. (1942). *History of Ancient India*. Delhi.
- Various Authors, (1922). *The Cambridge History of India*. Cambridge.

Semester-III

Course Code	Name of Subject	Credits Hours
ENG/211	English-III	3
COMP/212	Introduction to Computer Science	2
PER/213	GENERAL-V: Introduction to Persian	3
POL/214	GENEAL-VI: Introduction to Political Science	3
ARCH/ 215	FOUNDATION-III: Archaeological Heritage of Pakistan	3
ARCH/S216	FOUNDATION-IV: Pre History of Pakistan	3
	Total Credit Hours	18

ENG/211: English-III (Advance Communication Skills)

Type: Compulsory

Credit Hours: 3

Pre-requisites: English-II

Objectives

- To enable the students to meet their real-life communication needs.
- To enhance language skills and develop critical thinking.

Course Contents

1. Presentation skills
2. Preparing for interviews (scholarship, job, placement for internship etc.)
3. Essay writing (Descriptive, narrative, discursive, argumentative)
4. Academic writing (formal letters, applications)
 - How to write a research paper/term paper (emphasis on style, content, language, form, clarity, consistency)
5. Technical Report writing
6. Progress report writing
7. Study skills
8. Skimming and scanning, intensive and extensive, and speed reading, summary and précis writing and comprehension
9. Academic skills

10. Presentation skills

- Personality development (emphasis on content, style and pronunciation)

Recommended Books

Communication Skills

- Practical English Grammar by A. J. Thomson and A. V. Martinet. Exercises 2. Third edition. Oxford University Press 1986. ISBN 0 19 431350 6.

Writing

- Writing. Intermediate by Marie-Christine Boutin, Suzanne Brinand and Françoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 019 435405 7 Pages 45-53 (note taking).
- Writing. Upper-Intermediate by Rob Nolasco. Oxford Supplementary Skills. Fourth Impression 1992. ISBN 0 19 435406 5 (particularly good for writing memos, introduction to presentations, descriptive and argumentative writing).

Reading

- Reading. Advanced. Brian Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1991. ISBN 0 19 453403 0.
- Reading and Study Skills by John Langan.
- Study Skills by Richard York.

Course 212: Introduction to Computer Science

Type: Compulsory

Credit Hours: 3

Pre-requisites: None

Introduction

This course will introduce students an overview of computer science topics with an emphasis on problem-solving and algorithm development. Algorithm development will be taught using pseudo-code and diagrams. Computer programs will be written utilizing one or more computer languages. Topics to be included are computer architecture, networks, Boolean logic, and computer ethics.

Objectives

- Use a top-down approach to problem-solving Use and write appropriate computer science terminology in the description of the problems and their solutions, e.g. provide proper documentation.

Contents

1. Basic Definitions and Concepts
2. Hardware: Computer system and components
3. Software: Operating system and Programming
4. Problem-solving using the top-down approach
5. Design of algorithms
6. Structured programming
7. One or more high-level programming languages, e.g. Java, C++, Python
8. Von Neumann architecture
9. Computer concepts-translators, operating systems, graphics, networks, database systems, computer
10. architecture, and Boolean logic
11. Computer ethics
12. Cyber security

Learning Outcome

- Express problem solutions in the form of algorithms using pseudo-code
- Perform a trace of their program showing the programs' dynamics
- Implement their design using a high-level programming language

Recommended Books

- Norton, Peter. (2013). *Introduction to Computer Science*. (7th ed.). Student Book Company. India.

POL/213: Introduction to Political Science

Type: General

Credit Hours: 3

Pre-requisites: None

Introduction

This course provides a broad critical introduction to political science. It attempts a broad exploration of the processes and practices that shape political life, the institutional contexts and social framework of political activity, and the role of ideas, institutions and values in influencing political behaviour. The course examines the relationship between power and politics, provides a broad overview of the scope, methods and concerns of political studies, and examines the institutional contexts within which politics is produced.

Objectives

This course is designed to provide students with the critical conceptual and analytical tools that enable them to engage with broader questions about the nature, practice and exercise of power. It is also intended to help students develop critical skills for understanding the dynamics of political life, as well as engaging with questions of power and politics they confront on a day to day basis.

Course Contents

1. **Introduction:** basic concepts such as politics, government, power, influence, coercion, state, authority, civil society, and democracy, and the rudimentary methods of political science will be discussed.
2. **Ideas and politics:** great political thinkers will be explored in the context of the development of mass political ideas and ideologies such as liberalism, conservatism, socialism, environmentalism, and feminism.
3. **State and government:** the role and functions of the legislative, executive, and judicial branches will be explained, and various political regimes such as democratic and authoritarian governments will be explored.
4. **Political processes:** the role and evolution of electoral systems, interest groups, and political parties will be reviewed and assessed.
5. **Governing and policy-making:** the function of the civil service and the role of other decisional actors in terms of policy formulation and implementation will be explored.

Learning Outcomes

By the end of the course, students should have a broad critical understanding of power and politics. Be familiar with the fundamentals of, and key debates in, political science; the major theoretical approaches to the discipline and the scope, concepts, methods that frame analysis of political life; Appreciate the role of ideas, institutions and values in politics.

Recommend Texts

- Haq, Mazher ul. (1996). *Theory and Practice in Political Science*. Lahore Bookland.
- Ian Mackenzi (Ed.), *Political Concepts: A Reader and Guide*, Edinburgh, University Press, 2005.
- Janine Brodie and Sandra Rein (eds.). (2014). *Critical Concepts: An Introduction to Politics*. 5th edition. Toronto: Pearson.
- Rand Dyck and Christopher G. Anderson (eds.). (2016). *Studying Politics: An Introduction to Political Science*. 5th edition. Toronto: Nelson.
- Mintz, E., Close, D., & Croci, O. 2018. *Politics, Power, and the Common good: An Introduction to Political Science*. 5th ed. Toronto: Pearson Education.
- R. C. Agarwal. (2006). *Political Theory (Principles of Pol. Science)*. New Delhi: S. Chand & Co.
- Robert Jackson and Dorreen Jackson. (1997). *A Comparative Introduction to Political Science*. New Jersey: Prentice – Hall.
- Rodee Anderson etc. *Introduction to Political Science*, Islamabad, National Book Foundation, Latest Edition.

PER/214: Introduction to Persian

Type: General

Credit Hours: 3

Pre-requisites: None

Introduction

After studying the course, the students should be able to comprehend Persian language and express themselves at beginner's level, in different situation while giving a picture of Persian society and culture.

Objectives

The students will manage to write small compositions, CVs, and letters on various topics and will be able to communicate in Persian on a basic level.

Contents

Grammar (Verbs, Nouns, Adjectives, Adverbs) and Composition (Written Comprehension, Translation, Dialogue/Essay/Letter Writing).

Learning Outcome

Student should be able to deal certain situations in Persian language such as introducing oneself, ordering food, reserving hotels, understanding directions, shopping and understanding instructions and recipes.

Recommended Text

- Ahmad, Z. Persian Grammar.
- Basari, T. Rules of Persian Language.

ARCH/215: Archaeological Heritage of Pakistan

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Objectives

- After completion, the student would be able to analyze and explain administrative and cultural boundaries of the present-day Pakistan.

Course Contents

1. Introduction

- Stone age to first agricultural communities

2. Urban revolutions

- First Urbanism and its downfall (2600 to 5th century BC)
- Second Urbanism 5th century BC

3. Religions and their socio-political Role

- Buddhism, Hinduism, Jainism, etc

4. Establishment of Kingdoms/Empires: regional/ provincial perspective; focus must remain on cities, monument

5. s etc.

6. Establishment of States: regional/provincial perspective; focus must remain on cities, monuments etc.

Recommended Readings

- Agrawal, D. P. & Chakrabarti, D. K., eds. (1979). *Essays in Indian Protohistory*. Delhi.
- Agrawal, D. P. (1985). *Archaeology of India*. Great Britain.
- Allchin, B. and Allchin, R. (1968). *The Birth of Indian Civilization*. London.
- Allchin, B. and Allchin, R. (1982). *The Rise of Civilization in India and Pakistan*. Cambridge University Press.
- Allchin, F. R. (1986). *Lewan and the Bannu Basin*. Oxford.
- Allchin, F. R. (1963). *Neolithic Cattle-Keepers of South India*. Cambridge.
- Asthana, S. (1985). *Pre-Harappan Cultures of India and the Borderlands*. New Delhi.
- Chakrabarti, D. K. (1990). *The External Trade of the Indus Civilisation*. Delhi.
- Dales, G. F. and Kenoyer, M. (1986). *Excavations at Moenjodaro, Pakistan: the Pottery*. Pennsylvania.

- Dani, A. H. (1981). *Indus Civilization—New Perspective*. Islamabad..
- Fairservis, W. A. (1975). *The Roots of Ancient India*, 2nd ed. Chicago..
- Fairservis, W. A. (1967). *The Origin, Character and Decline of an Early Civilization*.
- Gupta, S. P. (1979). *Archaeology of Soviet Central Asia and the Indian Borderland*, Vols. I & II. Delhi.
- Jacobson, J., ed. (1986). *Studies in the Archaeology of India and Pakistan*. New Delhi.
- Kenoyer, M. *Ancient Cities of the Indus Valley Civilization*, Oxford, 1998.
- Khan, F. A. (1958). *Preliminary Report on Kot Diji Excavations 1957-8*. Karachi.
- Khan, F. A. (1964). *The Indus Civilization and Early Iran*. Karachi.
- Khan, F. A. (2002). *The Kot Diji Culture*. Khairpur University.
- Lal, B. B. (1997) *The Earliest Civilization of South Asia*. New Delhi.
- Mughal, M. R. (1998). *Ancient Cholistan*. Lahore.
- Possehl, G., ed. (1979). *Ancient Cities of the Indus*.
- Possehl, G., ed. (1982). *Harappan Civilisation*. New Delhi.
- Possehl, G., ed. (1979). *Ancient Cities of Indus*. New Delhi.
- Possehl, G., ed. (1980). *The Indus Civilisation in Saurashtra*. New Delhi.

ARCH/216: Pre History of Pakistan

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Introduction

Pakistan is the land which has distinction having complete chronological sequence of habitation since Stone Age to present. Prehistoric man lived in caves or under rock shelters and fashioned stone tools for hunting animals, cutting plants and for other activities. In Neolithic period he made permanent settlements, made pottery, evolved religion and learnt how to domesticate the plants and animals. This course discusses all developments in said periods and addresses the process of urbanization in this region. By studying this course students will be able to understand the development in human life through millions of years on one hand and on the other may comprehend the significance of the land of Pakistan in archaeological perspective.

Objectives

- To know about the science of Pre History
- To understand human evolution
- To create understanding of stone tools

Course Contents

1. Introduction

- Definition, scope and clarifications of concepts
- Geological Time Table
- Pleistocene chronology
- Principal features of Pleistocene and Holocene periods
- Evolution – Biological and Cultural
- Definition of Acheulian, Mousterian, Levolloisian, Clactonian, Chatelperronian, Magdalenian

2. Paleolithic Cultures

- Palacolithic Cultures of the potohar platean and Rohri Hills
- Principal tool – types, their manufacturing techniques and probable function

3. Mesolithic Cultures

- Characteristic features
- Mesolithic Cultures of Pakistan
- Principal tool – types, their manufacturing technique and probable function
- Intellectual developments: art and religion

4. Neolithic Revolution

- Domestication of animals and plants
- Initiating the art of Architecture
- Invention of fire and wheel
- Invention of Pottery
- Invention of new stone technology

5. Neolithic Communities in Pakistan

- Neolithic settlements in Balochistan – Quetta, Zhob, Loralai, Kalat and Khuzdar Valleys
- Mehrgarh
- Saraikhola
- Gumla

Learning Outcome

After completing this course, the student would be able to understand cultural and technological development of the Stone Age people.

Recommended Readings

- Agrawal, D.P. (1982). *The Archaeology of India*, Scandinavian Institute of Asian Studies, Monograph Series No. 46, London.
- Allchin, B. and Allchin F.R. (1982) *The Birth of Civilization in India and Pakistan*. Cambridge University Press.
- Ashfaque, S.M. (2004). *Bedrock of Human Prehistory in Pakistan*. Pakistan Study Centre.: University of Karachi.
- Bordes, F. (1961) *Typologie du Palaeolithique Anciens et Moyen*, Bordeaux.
- De Terra, H. & Paterson, T.T. (1939). *Studies in the Ice Age in India and associated Human Cultures*, Carnegie Institution of Washington D.C.

- Fairsevis, W.A. (1971) *The Roots of Ancient India*. New York.
- Graziosi, P. (1964). *Prehistoric Researches in northwestern Punjab* in Scientific Report of the Italian Expedition to Karakoram (K₂) and Hindukush, Pt. v, Vol. 1, Leiden
- Hawkes, J. and Woolley, L. (1963) *History of Mankind*, Vol. I (Prehistory and Origin of Civilization), UNESCO, London.
- Krishnaswami, V. D. (1947) “Stone Age India’ in *Ancient India*, No. 5. New Delhi.
- Leakey, L.S.B. (1934). *Adam’s Ancestors*. Oxford.
- Leakey, L.S.B. (1951). *Olduvai Gorge: A Report on the Evolution of Handaxe Culture in Beds I – IV*, Cambridge.
- Movius, H.L. (1949). *Lower Palaeolithic Archaeology in Southern Asia and the Far East*, Reprint. Oosterhout.
- Oakley, P. (1972). *Man the Tool Maker*. British Museum, London.
- Paterson, T.T. & Drummond H.J.H. (1962). *Soan: the Palaeolithic of Pakistan*. Memoir No. 2 of Department of Archaeology in Pakistan.
- Piggott. (1949). *Prehistoric India*. Penguin Book.
- Pitts, M. (1980). *Later Stone Implements*. U.K: Shire Publications
- Salim, M. (1986). *The Middle Stone Age Cultures of Northern Pakistan*. Islamabad.
- Sankalia, H.D. (1964). *Stone Age Tools, their Techniques, Names and Probable Functions*. Poona.
- Sankalia, H.D. (1974). *Prehistory and Protohistory of India and Pakistan*. Poona.

Semester-IV

Course Code	Name of Subject	Credit Hours
ENG/221	English-IV	3
GEOL/222	GENERAL-VIII: Basic Geology	3
ARCH/223	FOUNDATION-V: Proto History of Pakistan	3
ARCH/224	FOUNDATION-VI: Ancient Religions of Pakistan and India	3
ARCH/225	FOUNDATION-VII: Principles of Archaeology	3
ARCH/226	FOUNDATION-VIII: Museology	3
	Total Credit Hours	18

ENG/221: English-IV (Advance Academic Reading and Writing)

Type: Compulsory

Credit Hours: 3

Pre-requisites: English-III

Objectives

- To enable the students to:
- Read academic text critically.
- Write well organized academic text e.g. assignments, examination answers etc.
- Write narrative, descriptive, argumentative essays and reports (assignments).

Course Contents

1) Critical Reading

Advanced reading skills and strategies building on Foundations of English I & II courses in semesters I and II of a range of text types e.g. description, argumentation, comparison and contrast.

2) Advanced Academic Writing

Advanced writing skills and strategies building on English I & II in semesters I and II:

- Writing summaries of articles.
- Report writing.
- Analysis and synthesis of academic material in writing.
- Presenting an argument in assignments/term-papers and examination answers.

Recommended Readings:

- Aaron, Jane E. (2003). *The Compact Reader*. New York: Bedford.
- Axelrod, R. B and Cooper, C.R. (1987). *Reading Critical Writing Well: A Reader and Guide*. New York: St. Martin's Press.
- Barnet, S. and Bedau, H. (2011). *Critical Thinking, Reading and Writing: A Brief Guide to Writing. 6 th Ed*. Boston: Bedford/ St. Martin's.
- Behrens & Rosen. (1985). *Reading and Writing Across the Curriculum. 2nd Ed*. Boston: Little, Brown.
- Gardner, P. S. (2005). *New Directions: Reading, Writing and Critical Thinking*. New York: Cambridge University Press.
- George, D. and Trimbur, J. 2006. *Reading Culture: Context for Critical Reading and Writing*. 6th Ed. New York: Longman, 2009.
- Goatly, A. (2000). *Critical Reading and Writing: An Introductory Course*. London: Taylor & Francis.
- Grellet, F. (1996). *Writing for Advanced Learners of English*. Cambridge: CUP.
- Jordan, K. M. and Plakans, L. (2003). *Reading and Writing for Academic Success*. AnnArbor: University of Michigan Press.
- Jordon, R. R. (1999). *Academic Writing Course*. Harlow: Longman.
- Smith, L. C. (1990). *Issues for Today: An Effective Reading Skills Text*. NewYork: Newbury House Pub.
- Withrow, J. (1987). *Effective Writing*. Cambridge: CUP.

GEOL/222: Basic Geology

Type: General

Credit Hours: 3

Pre-requisites: None

Introduction

This course is designed to impart basic knowledge of geology. This will help the students to understand various types of rocks and minerals and to learn about sedimentary and structural features and the processes operative within and on the surface of the earth.

Course Contents

- Introduction and scope of geology
- Earth as a member of the solar system; its origin, age, composition and internal structure
- Introduction to plate tectonic,
- Isostasy: mountain building processes
- Earthquakes and volcanoes
- Weathering and erosion
- Introduction, identification and classification of rocks
- Sedimentary, igneous and metamorphic structures
- Physical properties of mineral
- Introduction to fossils in sedimentary rocks
- Introduction to folds, faults, joints, cleavage, foliation and lineation
- Geological Time Scale
- Concept and techniques of geological dating, relative and absolute dating

Recommended Readings

- Plummer, Charles., Charlson, Diane., & Lisa. (2015). *Physical Geology (15th edition)*. McGraw-Hill
- Richard M. Busch, (2011). *Laboratory Manual in Physical Geology (9th Edition)*, American Geological Institute: Pearson Education.
- Plummer, Charles., Charlson, Diane., & Lisa (2012). *Physical Geology* McGraw-Hill.
- Holmes, A. (1978). *Principles of Physical Geology*. Nelson.
- Park, R. G.. (1983). *Foundation of Structural Geology*. Blackie.
- Platt, J. I. (1961). *Elementary Exercises upon Geological Maps*.
- Bennison, G.M., 22 1997, Edward Arnold.

- Bennison, G.M. & Edward Arnold. (1997). *An Introduction of Geological Structures and Maps*.
- Plummer, McGeay & Carlson. (2005). *Physical Geology*.
- Jones, Norris. W., Johns & Charles E. (2005). *Lab Manual for Physical Geology*. McGraw-Hill.
- Smith, G., & Pun, A. (2006). *How Does Earth Work: Physical Geology and Process of Science*. Prentice Hall.
- McClay, K.R. (1987). *The Mapping of Geological Structures*. Open University Press.

ARCH/223: Proto History of Pakistan

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Introduction

This course focuses proto historic period when people invented writing and got expertise in various fields of life like town planning, bead making, pottery manufacturing, trade and many other fields of life. This course discusses all developments in said periods and addresses the process of urbanization in this region.

Objectives

- By studying this course students will be able to understand the development in human life through millions of years on one hand and on the other may comprehend the significance of the land of Pakistan in archaeological perspective.

Course Contents

1. Introduction

- Discovery of Indus Vally civilization
- Definition and Characteristics of Protohistory
- Terminology: Indus Cuture, Indus Civilization, Greater Indus Valley Civilization, Indus Sarasvati civilization, Pre-Harappan, Early Harappan, Harappan, Post Harappan.

2. Early Indus Period

- Understanding of terms: Kot Dijian, Ravi Phase, Hakra Phase
- Major Settlements of early Harappan: Mehrgarh, Kot Diji, Rehman Dhari, Kalibangan, Sarai Khola, Gumla.

3. Mature Indus Period

- Major sites – Mohenjodaro, Harappa, Ganwariwala, Balakot, Allahdino, etc.
- Geographical Distribution of mature Indus Cities
- Art and Architecture
- Town Planning

- Indus Scripts and its decipherment
- Major Crafts
- Seals
- Trade and Commerce
- Decline of Indus civilization and Late Harappans
- Aryan Problem

Learning Outcome

After completion of this course, the student will be able to analyze different aspects of the Indus civilizations

Recommended Readings

- Allchin, R & Bridget. (1982). *The Rise of Civilization in India and Pakistan*. London.
- Allchin, B. and Allchin F.R. (1982). *The Birth of Civilization in India and Pakistan*. Cambridge University Press.
- Casal, E. J. H. (1938). *Further Excavations at Mohenjo-daro*. 2 vols. New Delhi.
- Chakravati, Dilip K. (2003). *Indus Civilization Sites in India: New Discoveries*. New Delhi.
- Dani, A. H. (1991). *Rediscovery of the Civilization of Central Asia*. Islamabad: Quaid-i-Azam University.
- Gupta, S. P. (1979). *Archaeology of Soviet Central Asia and the Indian Borderland*, Vols. I & II. Delhi.
- Kenoyer, Jonathan Mark. (1999). *Ancient Cities of the Indus Valley*. Karachi: Oxford University Press.
- Kenoyer, Jonathan Mark (1989). *Old Problems and New Perspective in the Archaeology of South Asia*. Wisconsin University Press.
- Khan, F. A. (1965). *Excavations at Kot Diji*. Pakistan Archaeology. No.2..
- Jacobson, J., ed. (1986). *Studies in the Archaeology of India and Pakistan*. New Delhi.
- Khan, F. A. (1958). *Preliminary Report on Kot Diji Excavations 1957-8*. Karachi.
- Khan, F. A. (1964). *The Indus Civilization and Early Iran*. Karachi.
- Khan, F. A. (2002). *The Kot Diji Culture*. Khairpur University.
- Lal, B. B. (1997) *The Earliest Civilization of South Asia*. New Delhi.

- Mughal, M. R. (1998). *Ancient Cholistan*. Lahore.
- Possehl, G., ed.,. (1979). *Ancient Cities of the Indus*. New Delhi
- Possehl, G., ed.. (1982). *Harappan Civilisation*.New Delhi.
- Possehl, G., ed *Harappan Civilization: Contemporary Perspective*.
- Possehl, G., ed. (1980). *The Indus Civilisation in Saurashtra*. New Delhi.
- Mackay, E. J. H. (1943). *Chanhu-daro Excavations*. Nes Haven.
- Marshall, Sir John (1931) *Excavations at Mohenjodaro*, Vol. I – III. London.
- Maheswar, I.M. (1997). *The Indus Script*. New Delhi.
- Mughal, M. R. (1971). *The Early Harappan Period in the Greater Indus Valley*. Michigan.
- Sankalial, H. D. (1974). *Prehistory and Protohistory of India and Pakistan*. 2nd edn. Poona.
- Fairservis, W. A. (1971). *The Roots of Ancient India*. 2nd edn. India.
- Possehl, G. L. (ed.). (1979). *Ancient Cities of the Indus*. New Delhi.
- Shaffer, G. (1974). *Allahdino and the mature Harappan*. Cleveland.
- Parapola, A. & Koskenniemi, K.. (1973). *Corpus of Texts in the Indus Script*. Helsinki.
- Raikes, R. L. (1964). *The end of the anicnet cities of the indus'*, American Anthropologist, pp.284-99.
- Stacul, G. (1966). *Preliminary reprot on the pre-Buddhist necropolises in swat'*, East and West. Vol. 16.
- Vats, M. S. (1941). *Excavations at Harappa*. 2 vols. Delhi
- Wheeler, R. E. M. (1968). *The Indus Civilization*. Cambridge.

ARCH/224: Ancient Religions of Pakistan and India

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Introduction

This course is a study of religions originating in South Asia, with a focus on Hinduism, Buddhism, and Jainism. It will provide students with a basic understanding of the teachings, practices and the role of this religion as a connecting factor of several Asian cultures.

Objective

- To enable students to learn the philosophy of different religions of South Asia.

Course Contents

1. Vedism, Brahmanism and Hinduism

- Vedas
- Upanishads and freedom of religious speculation
- Vaishnavism: Origin and evolution
- Vasudeva-Krishna and the Bhagavat sect
- The *Bhagavad-Gita*
- Vishnu's *avatars* (incarnations)
- Shaivism
- The Pasupata sect and its teachings
- Maheshvara and Mahadeva
- Important gods and goddesses and their characteristic iconographic features.

2. Buddhism

- Buddhist literature
- Origin and development of Buddhism
- Teachings of Gautama Buddha
- Hinayana and Mahayana sects
- Tripitakas (i.e. Vinaya, Sutta and Abhidhamma Pitakas)
- Sthaviravadin School
- Evolution of the Great Vehicle (Mahayana)
- Mahasanghika and Sarvastivadins
- Adi Buddhas

- Bodhisattvas
- Lalitavistara
- Buddhist ethics and morality.

3. Jainism

- Jain tradition regarding twenty-four *tirthankaras* (prophets)
- Parshva and Mahavira
- Mahavira's life sketch
- Importance of the Ardha Magadhi canon
- Mahavira's meeting with Goshala Mankhaliputta (head of the Ajivika sect)
- Vardhamana Mahavira and his doctrine
- Jainism after Mahavira
- Jain canon, philosophy, and icons.

Learning Outcome

On completion of this course, student would be able to know about beliefs, rituals and practices of religions embraced in ancient times by people of South Asia.

Recommended Readings

- Basham, A. L. (1951). *History and Doctrines of the Ajivikas*. London.
- Bhandarkar, R. G. (1915). *Vaishnavism, Saivism and Minor Religious Sects*, Strasburg.
- Conze, E. (1953). *Buddhism, Its Essence and Development*, 2nd ed. Oxford.
- Davids, R. T. W. (1926). *Buddhism, Its History and Literature*, 2nd ed. London.
- Dowson, J. A. (1950). *Classical Dictionary of Hindu Mythology and Religion*, 7th ed. London.
- Farquhar, J. N. (1912). *A Primer of Hinduism*. London.
- Nasim Khan, M. (2006). *Treasures from Kashmir Smast – The Earliest Shivaite Monastic Establishment*. Peshawar..
- Keith, A. B. (1923). *Buddhist Philosophy in India and Ceylon*, Oxford..
- McGovern, W. N. (1923). *Manual of Buddhist Philosophy*. London.
- Stevenson, S. (1915). *The Heart of Jainism*. Oxford.
- Thomas, E.J. *The life of the Buddha as Legend and History*, London, 1975.
- Thomas, E. J. (1951). *History of Buddhist Thought*, 2nd ed. London.
- Hopkins, E. W. (1915). *Epic Mythology*. Strasburg.

ARCH/225: Principles of Archaeology

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Objectives

- To comprehend methods and techniques of archaeological survey, excavation, chronology, analysis of artefacts, etc.

Course Contents

1. Introduction

2. Time

- Relative and absolute chronology
- Stratigraphy and law of superimposition.
- Cross-dating with objects of known age
- Dendrochronology
- Thermo luminescence (TL) dating
- Radiocarbon dating
- Potassium Argon dating
- Fission track method
- Pollen analysis
- Pleistocene geochronology

3. Discovery

- How the ancient sites got buried
- Discovering archaeological sites and their features
- Aerial reconnaissance: Satellite imaging, aerial Photography

4. Survey

- Geographical Information System (GIS)
- Global Positioning System (GPS)
- Map reading
- Interpretation of aerial photographs
- Photogrammetry
- Survey at ground level
- Chain survey
- Contour map
- Use of compass and theodolite

- Electron Distance Measurer (EDM) /Total Station, 3D Scanner
- Electrical resistivity survey
- Proton magnetometer
- Sound-wave survey

5. Excavation

- Organization of an archaeological excavation
- Excavation tools
- Lay-out of an excavation
- Excavation methods: Sondage, grid-strip, quadrant etc.
- Types of Excavation: Verticals & horizontal, resource, etc.
- Trial trench
- Demarcation of layers (Stratigraphy)
- Sample collection: Soil, Pollen, Wood, Charcoal, bone, etc.

6. Recording

- Three dimensional measurements (=context)
- Graph plotting
- Record card
- Computer recording
- Field diary
- Archaeological photography
- Archaeological drawing.
- Artefact distribution map

7. Pottery yard

- Layout of pottery-yard
- Washing/cleaning and registration
- Classification
- Typology
- Pottery tabulation

8. Registration, Cataloguing

- Accession register
- Cataloguing of antiquities
- Antiquity distribution map.

9. Computer Application in the Analysis of Archaeological Data

10. Report Writing and Publication

Recommended Readings

- Alexander, J. (1970). *The Directing of Archaeological Excavations*, London. New York.
- Atkinson, R. J. C. (1953). *Field Archaeology*, 2nd ed. London.
- Barker, P. (1983). *The Technique of Archaeological Excavation*, London, 1983.
- Binford L. R. and Binford S. R., eds (1968). *New Perspective in Archaeology*. Chicago.
- Bowman, S. (1990). *Radiocarbon Dating, British Museum*. London.
- Butzer, K. W. (1971). *Environment and Archaeology: An Introduction to Pleistocene Geography*. Chicago.
- Coles, J. M. ((1973). *Archaeology by Experiment*, London.
- Daniel, G. E. (1976). *150 Years of Archaeology*. Cambridge.
- Doran, J. E. & Hodson, F. R. (1975). *Mathematics and Computers in Archaeology*. Edinburgh University Press.
- Fleming, S. (1977). *Dating in Archaeology*. London.
- Harris, E. C. (1989). *Principles of Archaeological Stratigraphy*. London.
- Harris, E. C. (1979). *Principle of archaeological stratigraphy*. New York: Academic Press.
- Joukowsky, M. (1998). *A Complete Manual of Field Archaeology*.
- Parkes, P. A. (1986). *Current Scientific Techniques in Archaeology*. London.
- Renfrew, C. and Bahn, P. (1991). *Archaeology: Theories, Methods and Practices*. London.
- Renfrew, C. (2000) *Loot, Legitimacy and Ownership: the ethical crisis in Archaeology*, London: Bristol Classical Press.
- Wheeler, R.E.M. (1954). *Archaeology from the Earth*. Oxford: Clarendon Press.
- White, G.G. and T.F. King (2007). *The Archaeological Survey Manual*, Walnut Creek: Left Coast Press

ARCH/226: Museology

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Introduction

This course primarily focuses on the study of museums, their collection, display, curatorial function and its role in education. This subject helps students in their professional career particularly when they get jobs in museums.

Objectives

- To know about the concept, origin, development, technical aspects, management and scope of the Museum.
- To educate the students about museum, labeling, exhibitions and handling the cultural material either displayed in galleries or housed in reserves.

Course Contents

1. Museum and Its Function

- Definition and its scope
- Functions: collection, recording, preservation, exhibition and education
- Different types of museums
- History of Museology in Pakistan
- Problems and prospects of museums in Pakistan

2. Museum Administration

- General organisation
- Staff and their functions: Director, Curator, technical, public-relation, educational, clerical, security, and contingent

3. Documentation

- Record keeping: Registers/Computer punch cards
- Temporary accession
- Permanent accession
- Record of storage
- Gallery record

4. Care and Storage of Museum Objects

- Objects on display
- Objects in stores (Storage conditions, Accessibility)
- Record of movement of museum exhibits & reserve
- Care against theft, dampness, dust, temperature, and light
- Care and repair of museum objects

5. Museum Architecture

- Requirement of museum building
- Plan for a museum
- Storage facilities
- Display galleries
- Service facilities: Library, photography, offices, workshops, etc.
- Public facilities: Cafeteria, gift-shop, lavatories

6. Museum Exhibition

- Permanent exhibition
- Planning and setting up an exhibition
- Showcase designing
- Labels
- Lighting
- Background of exhibits
- Mounting objects
- Temporary exhibition
- Traveling exhibition

7. Museum Education Research Programme

- Educational programme of a museum: Lectures, seminars, film-shows and cultural-shows
- Research and publications
- Research facilities in a museum

- Museum library

Recommended Readings

- Buck, R. A. and Jean Allman (eds.) (2010) *Museum Registration and Methods*, 5th edn., Gilmore: The AAM Press
- Burn, N. J. (1995). *Field Manual for Museums*. Washington D. C.
- Dani, A. H. (1970). *A Survey of Museums and Archaeology in Pakistan*. Peshawar.
- Dar, S. R. (1977). *Archaeology and Museums in Pakistan*. Lahore.
- Dar, S. R. (1980). *Museology and Museum Problems in Pakistan*. Lahore.
- Dar, S. R. (1979). *Repositories of our Cultural Heritage: A Handbook of Museums in Pakistan*. Lahore.
- Dudley, Sandra and Kylie Message (eds.) (2013). *Museum Worlds*.
- UNESCO, *The Organization of Museums; Museums Association of Pakistan; Canadian Museums Association; Studies in Conservation; International Council of Museums; Journal of the American Group for Conservation; Technology and Conservation*.
- Shakoor, M. A. (1953). *Museum Studies and Archaeology*. Peshawar.
- Simmons, John E. (2006). *Things Great and Small, Collection Management Policies*. AAM.
- Singh, A. P. (2006). *Conservation and Museum Techniques*. New Delhi.
- Thomson, G. (1978). *The Museum Environment: Conservation in the Arts, Archaeology and Architecture Series*. London.
- UNESCO, *Handbook of Museum Conservation*.

Semester-V

Course Code	Name of Subject	Credit Hours
ARCH/311	FOUNDATION-IX: Archaeological Tourism in Pakistan	3
ARCH/312	FOUNDATION X: Muslim History of South Asia	3
ARCH/313	MAJOR-I: Ancient World Civilizations-I (Mesopotamia, Egypt, Persia)	3
ARCH/314	MAJOR-II: Environmental Archaeology	3
ARCH/315	MAJOR-III: Ancient Art and Architecture of South Asia	3
	Total Credit Hours	15

ARCH/311: Archaeological Tourism in Pakistan**Type: Foundation****Credit Hours: 3****Pre-requisites: None****Introduction**

Pakistan possesses a rich cultural diversity and both sections are designed to enhance the scope and significance of archaeological tourism of Pakistan. It will enable students to understand the general introduction and importance of different pre-historic sites to Muslim monuments in a chronological sequence.

Objectives

- To introduce students the potential and significance of Pakistan's heritage
- To enable students to promote tourism in Pakistan

Course Contents

- Introduction, definition, types and scope of tourism
- Related industries, origin and destination, basic infrastructure
- Significance and scope of cultural tourism
- Geography and geo-physical features of Pakistan
- **Pre Historic Sites**
- Soan Valley, Rohri Hills, Sanghao Cave

- **Proto- Historic Sites**
- Mehergarh, Sarai khola, Gumla, Harappa, Mohenjodaro, Amri, Kotdiji, Rehman Dheri, Ghanweriwala
- **Ancient Historic Cities**
- Taxila, Pushkalavati, Peshawar, Multan, Lahore, Hund
- **Buddhist Establishments and Hindu Temples**
- Jamal Garhi, Takh e Bahi, Dharma Rajika (Chirtope), But Kara I, But Kara II (Swat), Mankiyala, Jauliyan Monastery, Salt Range Temples.
- **Cities and Monuments**
- **Cities:** Bambhore, Mansura
- **Monuments:** Multan Tombs, Uch Sharif, Lal Mara Sharif, Makli Hills, Chaukhandi Tombs, Sadan Shaheed

Learning Outcome

After completion of this course, the student would be able to analyze relationship between cultural heritage and tourism, identify, develop, manage and market the rich cultural heritage of Pakistan.

Recommended Readings

- Allchin, F. R. & B. (1982). *The Rise of Civilisation in India and Pakistan*. Cambridge,
- Faccenna, D (1964). *Guide to the 1956-62 Excavations—Swat*. Rome.
- Fairservis, W. (1971). *Roots of Ancient India*. New York.
- Excavation at Kot Koiji, *Pakistan Archaeology*, No. 2, 13-85, Karachi 1965.
- Marshall, J. (1960). *A Guide to Taxila*. Karachi. rpt.
- Menicol, Hurray. (1985). *History, Heritage and Environment*. London.
- Paterson, T. T. & Drummond, H. J. H. (1962). *Soan the Paleolithic of Pakistan*. Karachi.
- Qalib-i-Abid and Musarrat Abid, (Eds.) (2006). *Cultural History of the Punjab*. Lahore.
- Sankalia, H. D. (1962). *Prehistory and Protohistory in India and Pakistan*. Bombay.
- Siddiqi, M. I. (1959). *Wadei Sindh ki Tehzib* (Urdu). Karachi.
- Ikram, S. M. (194). *Muslim Civilization in India*. Lahore.
- Subarao, B. (192). *Personality of India: A Metropolis of the Northwest Frontier*. Oxford.
- Wheeler, M. (1959). *Early India and Pakistan*. Bombay.

ARCH/312: Muslim History of South Asia

Type: Foundation

Credit Hours: 3

Pre-requisites: None

Objectives

On completion, the student would be familiarized with the conquest of different parts of South Asia at the hands of various Muslim invaders, to analyze cultural, political, religious and social conditions of the present-day South Asia.

Course Contents

1. Introduction

2. Arabs

3. Turks

4. Afghans

- Lodhis
- Sikandar Lodhi, his administration and religious policy
- Ibrahim Lodhi and his weaknesses
- End of the Sultanate of Delhi
- Suris
- Sher Shah Suri
- Early life, capture of the throne and conquests; Reforms, administration and Public welfare projects; achievements as a ruler; Successors of Sher Shah; End of Suri dynasty.

5. Mughals and Post Mughals

- Phases of establishment and transition from Sultanate to
- Badshahat CE 1526 to 1576
- Mughal society, culture and administration CE 1576 to 1707
- Late Mughal phase CE 1707 to 1857.

Recommended Readings

- Ali, M. (198). *The Court of the Great Mughals*. Lahore.
- Amjid, Y. *Tareekh-e-Pakistan* (Urdu), Vols. I & II.
- Babar, Zahiruddin. *Tuzuk-i Babari (The Memoirs of Babar)*, Eng. Trans. A. S. Beverige, Lahore: Sang-i Meel Publications.

- Bakhshi, S. R. (ed.) (2003). *Advanced History of Medieval India* (3vols). New Delhi: Anmol Publishers.
- Barani, Z. (1986). *Tarikh-i Feroz Shahi*, Urdu tr. Aftab Asghar. Lahore.
- *Cambridge History of India*, Vols. II, III & IV.
- Dani, A.H. (2008). *History of Pakistan: Pakistan through the Ages*. Lahore: Sang-e Meel Publications.
- Elliot & Dowson. (1976). *The History of India as Told by Its Own Historians*, all Vols. Lahore.
- Ikram, S. M. (1966). *Muslim rule in India & Pakistan: 711-1858 A.C.* Lahore: Star Book Depot.
- Ikram, S. M. (1994). *Aab-i Kausar* (Urdu). Lahore.
- Ikram, S. M. (1992). *Mauj-i Kausar* (Urdu). Lahore.
- Ikram, S. M. *Rud-i Kausar* (Urdu), Lahore, 1988.
- Majumdar, R.C. (ed). (1970). *An Advanced History of India* (Volume 2). Delhi.
- Naqvi, H. K. (1990). *History of Mughal Government & Administration*. Delhi: Kanishka Publishing House.
- Nazim, M. (1971). *The Life and Times of Sultan Mahmud of Ghazna*. New Delhi.
- Qureshi, I. H., (ed.) (1992). *A Short History of Pakistan*. Karachi: Karachi University Press.
- Riazul, Islam. (1970). *Indo-Persian Relations*. Teheran: Iranian Culture Foundation.

ARCH/313: Ancient World Civilizations-I (Mesopotamia, Egypt, Persia)

Type: Major

Credit Hours: 3

Pre-requisites: None

Introduction

This paper primarily focuses on the concept of civilization through the emergence of different civilized societies in the world. The student will be able to analyze different aspects of various ancient world civilizations such as socio political setup, writing system, languages, art and architecture etc.

Course Contents

1. Concept of Civilization

- Concept of culture and civilization
- Elements of civilization
- Basic conditions of civilization

2. Mesopotamian Civilization

- Environmental background
- Chronology (3500-600 BC)
- Socio-political set-up of the Sumerians, Akkadians, Babylonians, Assyrians and Chaldeans
- Various aspects of civilization: art, architecture, writing, seals, religions and economy

3. Egyptian civilization

- Egypt geophysical history and its impact on local cultures
- Art and architecture
- Religion
- Writing system
- Contribution in literature, science, philosophy, medicine

4. Iranian Civilization

- Origin of Iranian Civilization
- Achaemenians: history and formation of their empire
- Provincial administration system
- Zoroastrian Religion
- Art and architecture

- Cyrus
- Darius I and Darius II
- Sasanians

Recommended Readings

- Breasted, J. H. (1944). *Ancient Times—A History of the Early World*. Boston.
- Durant, W. (1954). *Our Oriental Heritage*. New York.
- Frankfort, H. (1970). *Art and Architecture of the Ancient Orient*. USA.
- *The Birth of Civilizations in the Near East*, London, 1959.
- Frye, R. N. (1956). *The Heritage of Persia*. New York.
- Ghoshman, R. (1968). *Iran, from the earliest Time to the Islamic conquest*. England.
- Kenoyer, J. M. (1999) *Indus Civilization*. Oxford.
- Ralf & Burns. (1974). *World Civilization*. New York.
- Roaf, M. (1964). *Cultural Atlas of Mesopotamia and the Ancient Near East* Roux. London.
- Smith, W. S. (1958). *The Art and Architecture of Ancient Egypt*. London.
- Watson, W. (1966). *Early Civilisation of China*. London.
- Boyle, J. A. (1978). *Persia: History and Heritage*. London.

ARCH/314: Environmental Archaeology

Type: Major

Credit Hours: 3

Pre-requisites: None

Course Contents

1. Introduction

- Ecosystem
- Paleo environmental studies
- Concepts for Paleoenvironmental reconstruction
- Mechanisms of environmental changes
- Human response to environmental changes

2. Chronology

- Introduction to chronometry and correlation
- Measuring time with isotopes and magnetism

3. Climate

- Scales in time and space
- Climate reconstruction

4. Geomorphology

- Landforms
- Landforms of shores and shallow water

5. Sediments and soil

- Basic principles of sedimentology and soils science
- Study techniques in sedimentology
- Archaeological matrices

6. Vegetation

- Concept and methods in Paleobotany
- Vegetation in Paleoecology

7. Fauna

- Faunal Paleoenvironments: concept and methods
- Faunal Paleoecology
- Human among animals

8. Integration

- Anthropocentric Paleoecology

Recommended Readings

- Buzer, K.W. (1971). *Environment and Archaeology*. Chicago
- Butzer, K. W. (1982). *Archaeology as Human Ecology*. New York: Cambridge University Press.
- Dincauze, F. Dena. (2000). *Environmental Archaeology: Principles and Practice*. London: Cambridge University Press.
- Evans, J. G. (1978). *An Introduction to Environmental Archaeology*. London: Cornell University Press.
- Goudie A. (1981). *Geomorphological Techniques*. London: George Allen and Unwin.
- Shackley, M. (1981). *Environmental Archaeology*. London

ARCH/315: Ancient Art and Architecture of South Asia

Type: Major

Credit Hours: 3

Pre-requisites: None

Introduction

This course is primarily designed to probe the origin of different artistic and architectural forms that have been evolved through the centuries. It will greatly facilitate the students in understanding the Buddhist and Hindu stylistic as well as architectural traditions of Pakistan and India.

Course Contents

1. Architecture

- Vedic Period architectural traditions
- Mauryan architecture
- Buddhist architecture: Stupa, Monastery, Rock-Cut Sanctuaries, etc.
- Hindu and Jain architecture.

2. Art

- Mauryan art
- Shunga art
- Early Andhra art
- Later Andhra art
- Mathura art (Kushan Period)
- Gandhara art (Kushan Period)
- Origin of the Buddha image
- Gupta art
- Ajanta cave paintings
- Gandhara School of Painting
- Buddhist Art of Kashmir
- Iconography of Hindu Triad
- Rock Art of Pakistan.

Recommended Readings

- Ackermann, H. C. (1975). *Narrative Stone Reliefs from Gandhara in the Victoria and Albert Museum in London, ISMEO Reports and Memoirs XVII*. Rome.

- Banerjea, J. N. (1956). *The Development of Hindu Iconography*. Calcutta 1956.
- Behrendt, K. A. (2004). *The Buddhist Architecture of Gandhara*. Leiden.
- Behrendt, K. A. (2007). *The Art of Gandhara in the Metropolitan Museum of Art*. New Haven.
- Bhattacharyya, B. (1963). *The Indian Buddhist Iconography*. Calcutta.
- Brown, P. (1956). *Indian Architecture Buddhist and Hindu Periods*. Bombay.
- Chakrabarti, Mangala. (2006). *A Catalogue of Sculptures of Mathura School in the Indian Museum*. India: Indian Museum Calcutta.
- Dani, A.H. (1968). *Gandhara Art of Pakistan*. Peshawar.
- Foucher, A. (1914). *The Beginnings of Buddhist Art*. London.
- Harle, J. C. (1974). *Gupta Sculptures*. London.
- Huntington, S. L. & Huntington, J. C. (1985). *The Art of Ancient India Buddhist, Hindu, Jain*. New York.
- Ingholt, H. (1957). *Gandhara Art in Pakistan*. New York.
- Khan, M. Ashraf. (2005). *A Catalogue of Gandhara Stone Sculptures in the Taxila Museum*. Islamabad.
- Khan, Gul Rahim, (2015) *A Catalogue of Sculptures from Butkara III (Swat), Khyber Pakhtunkhwa in the SSAQ Museum of Archaeology and Ethnology, University of Peshawar*, Vol-I. Peshawar: Department of Archaeology, University of Peshawar
- Knox, J. R. (1992). *Amaravati, Buddhist Sculpture from the Great Stupa*. British Museum.
- Kurita, I. (1998). *Gandhara Art (2 Vols)*. Tokyo.
- Marshall, J. (1951). *Taxila*. Cambridge.
- Marshall, J. (1960). *The Buddhist Art of Gandhara*. Cambridge.
- Masih, F. (2015). *Temples of the Salt Range and North and South Kafirkot: A Detailed Analysis of Their Architecture and Decoration*. Lahore: University of the Punjab.
- Nasim Khan, M. (2000). *Buddhist Paintings in Gandhara*. Peshawar.
- Nasim Khan, M. (2006). *Treasures from Kashmir Smast: The Earliest Śaiva Monastic Establishment*. Peshawar.
- Nasim Khan, M. (2010). *The Sacred and the Secular. Investigating the Stupa and Settlement Site of Aziz Dheri*. Peshawar.

- Nehru, L. (1989). *Origin of Gandharan Style A Study of Contributory Influences*. Delhi.
- Rosenfield, J. M. (1967). *The Dynastic Arts of the Kushans*. Berkeley.
- Rowland, B. (1953). *Art and Architecture of India Buddhist, Hindu, Jain*. London.
- Zwalf, W. (1996). *A Catalogue of the Gandhara Sculpture in the British Museum*. The Trustees of the British Museum.

Semester-VI

Course Code	Name of Subject	Credit Hours
ARCH/321	MAJOR-IV: Ancient World Civilizations-II (China, Greece, Rome)	3
ARCH/322	MAJOR-V: Indian Paleography and Epigraphy	3
ARCH/323	MAJOR-VI: Numismatics of Pakistan and India-I (Pre Muslim Period)	3
ARCH/324	MAJOR-VII: Early Muslim Art and Architecture	3
ARCH/325	MAJOR-VIII: Research Methodology	3
	Total Credit Hours	15

ARCH/321: World Civilizations-II (China, Greece, Rome)

Type: Major

Credit Hours: 3

Pre-requisites: None

Introduction

This paper primarily focuses on the concept of civilization through the emergence of different civilized societies in western the world. The student will be able to analyze different aspects of various ancient world civilizations such as socio-political setup, writing system, languages, art and architecture etc.

Contents

1.Chinese civilization

- Shang Dynasty
- Chou Dynasty
- Chen Dynasty
- Art and architecture
- Contributions in philosophy

2.Greek Civilization

- origin and development of the Greek Civilization
- origin of city states

- Hellenic and Hellenistic phases
- Art and architecture
- Literature
- Philosophy
- Science

3. Roman Civilization

- Origin and development of Roman Empire
- General characteristics of Roman Culture
- Art and architecture
- Philosophy and science
- Roman Law

Recommended Readings

- Breasted, J. H. (1944). *Ancient Times—A History of the Early World*. Boston.
- Durant, W. (1954). *Our Oriental Heritage*. New York..
- Frankfort, H. (1970). *Art and Architecture of the Ancient Orient*. USA.
- (1959). *The Birth of Civilizations in the Near East*. London.
- Frye, R. N. (1956). *The Heritage of Persia*. New York.
- Ralf and Burns (1974). *World Civilization*. New York.
- Watson, W. (1966). *Early Civilisation of China*. London.

ARCH/322: INDIAN PALAEOGRAPHY AND EPIGRAPHY

Type: Major

Credit Hours: 3

Pre-requisites: None

Introduction

This course is primarily designed to trace the origin and development of ancient scripts, styles, use of ancient languages in epigraphs, techniques of engraving on hard surfaces of rocks, slabs, metal plates, etc. The major outcome of this course would be to know about valuable historical data contained within these epigraphs.

Course Contents

- 1. Introduction to different ancient Indian scripts**
- 2. Origin of writing in Pakistan and India (South Asia).**
- 3. Brahmi Script**
 - Area
 - Materials
 - Characters and symbols
 - Origin
 - Development
 - Sharada
 - Devanagri.
- 4. Kharoshthi Script**
 - Area
 - Materials
 - Characters and symbols
 - Origin
 - Decipherment
 - Development
- 5. Epigraphy**
 - Importance of Epigraphic research in Archaeology
 - History of Epigraphic research in Archaeology
 - Survey of the Epigraphic records
 - Epigraphy as a source of ancient history of Pakistan and India.

Recommended Readings

- Agrawala, P. K. (1983). *Imperial Gupta Epigraphs*. Varanasi.
- Bhandarkar, D. R. (1932). *A List of Inscriptions of Northern Indian in Brahmi and Its Derivative Scripts, from about 200 A.C.* Calcutta.
- Buhler, G. (1904). *Indian Palaeography*. Calcutta.
- Burgess, J. (1970). *Epigraphia Indica*, Vol. II, Indian rpt.
- Burgess, J. (1964). *Report on the Buddhist Cave Temples and Their Inscriptions*. Varanasi.
- Burgess, J. *Corpus Inscriptionum Indicarum*, Vol. II. Calcutta.
- Cunningham, A. (1961). *Corpus Inscriptionum Indicarum*, Vol. I, *Inscriptions of Asoka*. Varanasi.
- Dani, A. H. (1963). *Indian Palaeography*. Oxford.
- Dani, A. H. (1979). *Kharoshthi Primer*. Lahore.
- Hultzsch, E. (1925). *Corpus Inscriptionum Indicarum*, Vol. I. Oxford.
- Konow, S. (1929). *Corpus Inscriptionum Indicarum*, Vol. II. Calcutta.
- Nasim Khan, M. (2006). *Treasures from Kashmir Smast – The Earliest Shivaite Monastic Establishment*. Peshawar.
- Nasim Khan, M. (2009). *Kharoshthi Manuscripts from Gandhara (Rprt.)*. Peshawar.
- Nasim Khan, M. (2010). *The Sacred and the Secular. Investigating the Stupa and Settlement Site of Aziz, Peshawar Valley, Khyber Pukhtoonkhwa (3 vols)*. Peshawar.
- Pandey, R. B. (1957). *Indian Palaeography*. Banaras.1952
- Salomon, R. (1998). *Indian Epigraphy*. New Delhi.
- Sircar, D. C. (1966). *Indian Epigraphical Glossary*. Varanasi.
- Sircar, D. C. (1965). *Indian Epigraphy*. Delhi.
- Upasak, C. S. (2001). *History and Palaeography of Kharoshthi Script*. Varanasi.

ARCH/323: Numismatics of Pakistan and India-I (Pre Muslim Period)

Type: Major

Credit Hours: 3

Pre-requisites: None

Introduction

This course fundamentally focuses on the study of the coins of Pakistan and India. It marks the most significant aspects to reconstruct the history. It will greatly facilitate the students to learn about the ancient history and several other aspects such as cultural diversity, socio-economic, political and religious conditions.

Course Contents

1. Introduction

- Numismatics: Definition, scope and significance
- Mints
- History of coins
- Techniques of manufacturing coins

2. Numismatics: Pre-Muslim Period

- Antiquity of coinage in India and Pakistan
- Punch marked coins
- Indo-Greek coins
- Scytho-Parthian coins
- Kushan coins
- Huna coins
- Hindu-Shahi coins

Recommended Readings

- Rahman, A. (1979). *The Last Two Dynasties of the Shahis*. Islamabad.
- Bhandarkar, D. R. (1984). *Lectures on Ancient Indian Numismatics*. Patna.
- Bopearachchi, O. & Amanur Rahman. (1995). *Pre-Kushana Coins in Pakistan*. Islamabad.
- Bopearachchi, O. (1993). *Indo-Greek, Indo-Scythian and Indo-Parthian Coins in the*

Smithsonian Institute. Washington.

- Chakraborti, S. K. (1986). *Socio-religious and Cultural Study of the Ancient Indian Coins*. Delhi.
- Cooper, R. D. (1988). *The Art and Craft of Coin Making: A History of Minting Technology*. London.
- Cribb, J. (1986). *Money: from Cowrie Shell to Credit Cards*. London.
- Cunningham, A. (1967). *Coins of Medieval India from the Seventh Century Down to the Muhammadan Conquests*. London.
- Cunningham, A. (1962). *Later Indo-Scythians*, Vol. II, rpt. Varanasi.
- Gardner, P. (1966). *The Coins of the Greek and Scythic Kings of Bactria and India in the British Museum*. London.
- Mitchiner, M. (1973). *The Origin of Indian Coinage*. London.
- Narain, A. K. (1957). *Indo-Greeks*. Oxford.
- Nasim Khan, M. (2006). *Treasures from Kashmir Smast – The Earliest Shivaite Monastic Establishment*. Peshawar.
- Nasim Khan, M, Errington, E & Cribb, J. (2008). *Coins from Kashmir Smast – New Numismatic Evidence*. Peshawar.
- Sahni, B. (1945). *The Technique of Casting Coins in Ancient India*, Memoirs of the Numismatic Society of India, Vol. I. Bombay.
- Singh, S. S. (1984). *Early Coins of North India: An Iconographic Study*. New Delhi.
- Smith, V.A. (1972). *Coins of Ancient India*, Vol. I of *Catalogue of the Coins in the Indian Museum, Calcutta*. Oxford.
- Whitehead, R. B. (1977). *Catalogue of Coins in the Punjab Museum*, Vol. III, rpt. Lahore.
- Whitehead, R. B. (1914). *Catalogue of Coins in the Punjab Museum*, Lahore, Vol. I. Oxford.
- Whitehead, R.B. (1977). *Catalogue of Coins in the Lahore Museum*, Lahore, Vol II.

ARCH/ 324: Early Muslim Art And Architecture

Type: Major

Credit Hours: 3

Pre-requisites: None

Introduction

This course fundamentally focuses on the early Muslim art and architecture. It is divided into two sections. Section one deals with architecture which was evolved after the rise of Islam. Architecture has the language of its own and marks the expression of thoughts, beliefs and ideals. It would help students to explore the different architectural forms manifested in religious and secular structures. Section two deals with the arts of Islamic era. It marks a definite style, repertory of motifs and striking innovation. Student would learn that how it was evolved with an idea and a faith.

Course Contents

Section-A: Architecture

1. Origin and development of early Muslim architecture

- Mosque of Madina
- Khana Kaba

2. Ummayyad Architecture

- The Dome of Rock
- Great Mosque of Damascus
- Qusayr Amra
- Great Mosque of Qairawan
- Qasr-al-Hair-ash-Sharqi
- Qasr-al-Tuba (The Palace of Mshatta)
- Great Mosque of Haroon

3. Abbasid Architecture

- Foundation City of Baghdad
- The Great mosque of Raqqa

- Great mosque of Cordova
- Masjid al Aqsa
- Samarra: Mosque and Palaces

Section-B: Art

- Early Islamic Art upto Abbasid Period
- Art in Persia until Mongol conquest
- Mesopotamia: 10th to 13th century
- Persia: Mongol Period
- Syria and Egypt: 12th to 13th century
- The Seljuks
- The Ottoman Turks

Recommended Readings

- Cresswell, K.A.C. (1958). *A Short Account of Early Muslim Architecture*. London.
- K.A.C (1932-40). *Early Muslim Architecture*, 2 vols. New York.
- David Wade. (1976). *Patterns in Islamic Art* London. New York.
- Dunn, W. (1908). 'The Principle of Dome Construction', *Architectural Review*, XXIII,
- Edwards, C.C. (1915). 'History of the Dome in Persia', *Journal Royal Asiatic Society*. London.
- Hillenbrand, R. (1994). *Islamic Architecture: Form, Function and Meaning*. New York: Columbia University Press.
- Pereira, Jose. (2004). *The Sacred Architecture of Islam*. New Delhi.
- Rice, David. Talbot. (1975). *Islamic Art*. Thames and Hudson.

ARCH/326: Research Methodology

Type: Major

Credit Hours: 3

Pre-requisites: None

Course Contents

- Definition, problems, types etc.
- Archaeological research design
- Archaeological research project
- Formulation of hypothesis
- Implementation of research
- Data collection, different methods/techniques, etc.
- Analysis of archaeological data
- Interpretation and synthesis of archaeological data
- Research report/Seminar/Oral examination

Recommended Readings

- Hult, C. A. (1990). *Researching and Writing Across the Curriculum*, 2nd Ed. California.
- Lester, J. D. (1987). *Writing Research Papers: A Complete Guide*. London.
- Marius, R. (1989). *A Short Guide to Writing about History*. London.
- Sharer, R. J. and Wendy A. (1980). *Fundamentals of Archaeology*. London.
- Naz Arifullah, S. & Bhutti, K.M. (1995). *Research Process Simplified*. Peshawar.
- Goode & Hatt. (2000). *Methods in Social Research*. Islamabad: National Book Foundation
- Mali, A. L. Pancholi Kundan. (1988). *The Fundamentals of Research Methodology*. Jaipur.
- Bahr, C. & Albert. (2000). *Social Science Research Methods*. Islamabad: National Book Foundation.

Semester-VII

Course Code	Name of Subject	Credit Hours
ARCh/411	MAJOR-IX: Numismatics of Pakistan and India-II (Muslim Period)	3
ARCH/412	MAJOR- X: Preliminary Sanskrit	3
ARCH/413	MAJOR-XI: Muslim Architecture of Pakistan and India	3
ARCH/414	ELECTIVE-I (within MAJOR): Jaina Heritage of Pakistan	3
ARCH/415	ELECTIVE-II (within MAJOR): Archaeological Conservation	3
	Total Credit Hours	15

ARCH/411: Numismatics of Pakistan and India-II (Muslim Period)

Type: Major

Credit Hours: 3

Pre-requisites: None

Introduction

This course fundamentally focuses on the study of the Muslim coins of Pakistan and India. It marks the most significant aspects to reconstruct the history. Thus, it will greatly facilitate the students to learn about the Muslim history and several other aspects such as cultural diversity, socio-economic, political and religious conditions.

Course Contents

1. Numismatics of Muslim Period: Introduction
2. Coins of the local rulers of Banbhore and Mansura
3. Coins of the Ghaznavid and Ghorid rulers
4. Coins of the early Sultanate period
 - Khaljis
 - Tughlaqs
 - Syeds

- Lodhis
 - Suris
5. Coins of the Mughal rulers
 6. Coins of Local rulers

Recommended Readings

- Rahman, A. (1979). *The Last Two Dynasties of the Shahis*. Islamabad.
- Bhandarkar, D. R. (1984). *Lectures on Ancient Indian Numismatics*. Patna.
- Bopearachchi, O. & Amanur Rahman. (1995). *Pre-Kushana Coins in Pakistan*. Islamabad.
- Bopearachchi, O. (1993). *Indo-Greek, Indo-Scythian and Indo-Parthian Coins in the Smithsonian Institute*. Washington.
- Chakraborti, S. K. (1986). *Socio-religious and Cultural Study of the Ancient Indian Coins*. Delhi.
- Cooper, R. D. (1988). *The Art and Craft of Coin Making: A History of Minting Technology*. London.
- Cribb, J. (1986). *Money: from Cowrie Shell to Credit Cards*. London.
- Cunningham, A. (1967). *Coins of Medieval India from the Seventh Century Down to the Muhammadan Conquests*. London.
- Cunningham, A. (1962). *Later Indo-Scythians*, Vol. II, rpt. Varanasi.
- Gardner, P. (1966). *The Coins of the Greek and Scythic Kings of Bactria and India in the British Museum*. London.
- Mitchiner, M. (1973). *The Origin of Indian Coinage*. London.
- Narain, A. K. (1957). *Indo-Greeks*. Oxford.
- Nasim Khan, M. (2006). *Treasures from Kashmir Smast – The Earliest Shivaite Monastic Establishment*. Peshawar.
- Nasim Khan, M, Errington, E & Cribb, J. (2008). *Coins from Kashmir Smast – New Numismatic Evidence*. Peshawar.
- Sahni, B. (1945). *The Technique of Casting Coins in Ancient India*, Memoirs of the Numismatic Society of India, Vol. I. Bombay.
- Singh, S. S. (1984). *Early Coins of North India: An Iconographic Study*. New Delhi.
- Smith, V.A. (1972). *Coins of Ancient India*, Vol. I of *Catalogue of the Coins in the Indian Museum, Calcutta*. Oxford.

- Whitehead, R. B. (1977). *Catalogue of Coins in the Punjab Museum*, Vol. III, rpt. Lahore.
- Whitehead, R. B. (1914). *Catalogue of Coins in the Punjab Museum*, Lahore, Vol. I. Oxford.
- Whitehead, R.B. (1977). *Catalogue of Coins in the Lahore Museum*. Lahore.
- Wright, N. H. (1974). *The Coinage and Metrology of the Sultans of Delhi*. Delhi.

Arch/412: Preliminary Sanskrit

Type: Major

Credit Hours: 3

Pre-requisites: None

Course Contents

1. The Devnagri script
2. Nouns—masculine, feminine and neuter
3. Seven different cases of nouns
4. Verb-roots divided into ten classes or conjugations
5. The improper diphthong or guna
6. Important Sanskrit inscriptions found in Pakistan

Recommended Readings

- Whitney W. D. (1879). *A Sanskrit Grammar*. Leipzig and London.
- Macdonell. A. A. (1916). *A Vedic Grammar*. Oxford.
- Allen, W.S. (1953). *Phonetics in Ancient India*. London.
- Belvalkar, S. K. (1915). *Systems of Sanskrit Grammar*. Poona.
- Geiger, W. Tr, B, K. Gosh. (1943). *Pali Literature and Language*. Calcutta.

Arch/ 413: Muslim Architecture of Pakistan and India

Type: Major

Credit Hours: 3

Pre-requisites: None

Introduction

This course is designed to probe the different architectural and artistic traditions of Muslim architecture in India and Pakistan. Muslims have produced magnificent art of building in the long span of time covering 8th century to 18th century. It marks an era of rich architectural splendors. On completion of this course, the student would be able to identify sources and development of Muslim Architecture evolved under different ruling dynasties.

Course Contents

1. Sources of Indian Architecture

2. Arab Period

- Banbhore Mosque
- Mansurah Mosque

3. Ghaznavid Period

- Odigram
- Gira Mosque
- Tomb of Sai-ud-Daula Mahmood

4. Ghurid Period

- Tomb of Khalid bin Walid
- Tomb of Shah Yousaf Gardez
- Tomb of Shahab-ud-Din Ghouri

5. Sultanate Period

- Quwwatul Islam Mosque
- Qutb Minar
- Tomb of Iltutmish
- Adam Wahan
- Tomb of Baha-ud-din Zakriya
- Tomb of Sadan Shahed
- Tomb of Baba Farid Ganj Shaker
- Tomb of Ala-ud-din Khilji

- Alai Darwaza
- Tomb of Ghiyasud-din Tughlaq
- Shah Rukn-e-Alam

6. Suri Period

- Rohtas Fort
- Tomb of Sher Shah Suri

7. Mughal Period

- Tomb of Hamayun
- Lahore Fort
- Fateh Pur Sikri
- Maryam Zamani Mosque
- Hiran Minar
- Jahangir's Tomb
- Noor Jahan's Tomb
- Lal Masjid Delhi
- Taj Mahal
- Wazir Khan Mosque
- Shalamar Garden
- Badshahi Mosque

Recommended Readings

- Abdur Rahman. (1981). *Islamic Architecture of Pakistan: An Introduction*. Peshawar.
- Ali, T. (1988). *Anonymous Tombs in the Gomal Valley and the Beginning of Tomb Architecture in Pakistan*. Peshawar.
- Arnold, T. et al. (2001). *Islamic Art and Architecture*. Goodword Books.
- Brown, P. (1942). *Indian Architecture (The Islamic Period)*. Bombay.
- Bunce, Fredrick W. (2004). *Islamic Tombs in India: Iconography and Genesis of their Design*. New Delhi: D.K.Printworld.
- Chughtai, M. A. (1972). *The Badshahi Masjid: History and Architecture*. Lahore.
- Chughtai, M. A. (1975). *The Wazir Khan Mosque Lahore: History and Architecture*. Lahore.
- Dani, A. H. (1982). *Thatta-Islamic Architecture*. Islamabad.
- Ettinghausen, R. & Grabar, O. (1987). *The Art and Architecture of Islam 650-1250*,

New Haven: Yale University Press.

- Field, R. (1998). *Geometric Patterns from Islamic Art & Architecture*. Taurin Publications.
- Guide Books on *Thatta, Lahore Fort, Shalimar Garden, Banbhore*, Department of Archaeology and Museums, Government of Pakistan.
- Hillenbrand, R. (1994). *Islamic Architecture: Form, Function and Meaning*. New York: Columbia University Press,
- Kak, R.C. (1991) *Ancient Monuments of Kashmir*. Mirpur: Verinag Publishers
- Khan, A. N. (1983). *Multan: History and Architecture*. Islamabad.

ARCH/ 414: Jaina Heritage of Pakistan

Type: Elective

Credit Hours: 3

Pre-requisites: None

Objectives

Jaina heritage is a less studied and much ignored subject in our country. The objective of this course is to acquaint the scholars of archaeology to understand and appreciate this genre of art and architecture that constitute our country's rich heritage. This course will contribute to the understanding of Jaina history, philosophy, schism, traditions in general and Jaina art and architecture in Pakistan in particular with an overview and comparison of important Jaina temples of India.

Course Contents

- **History and Philosophy of Jainism**
 - What is Jainism?
 - Jaina History (From Mahavir to present)
 - Jaina History in Pakistan
 - Major Jaina Sects
 - Jain Traditions: Sources, Antiquity, Features
 - Tirthankaras and other deities
 - Jain Mythology, Cosmology (introductory)
 - Jain Literature
 - Rituals and Practices
 - Jaina Pilgrimage Sites and Temple Cities
- **Jaina Art and Architecture in Pakistan**
- **Architecture**
 - Jaina Architecture in India (Introductory)
 - Jaina Architecture of Punjab
 - Jaina Architecture of Sindh
- **Art**
 - Sculptural Art
 - Paintings

Recommended Readings

- Ahmad, M. (2015, March). Newly Discovered Jaina Carana Padukas in Chel-Abdal Chakwal. *CoJS Newsletter*, pp. 40-43.
- Bhaskar, B. J. (1972). *Jainism in Buddhist Literature*. Nagpur: Alok Prakashan.
- Bhattacharya, B. C. (1971). *The Jaina Iconography*. Delhi: Motilal Banarsidass.
- Bhattacharyya, H. (1925). *Divinity in Jainism*. Madras: The Devendra Printing & Publishing Co. Ltd.
- Bhattacharyya, P. (1992). Buddhist and Jain Influence on Manu and His Interpretation of Veda. *Proceedings of the Indian History Congress*. 53, pp. 106-109. Indian History Congress.
- Brown, P. (1959). *Indian Architecture (Buddhist and Hindu Periods)*. Bombay: D. B. Taraporvala Sons & Co. Private LTD.
- Buhlar, J. G. (1903). *The Indian Sect of Jainas*. Vienna. Retrieved from <http://www.herenow4u.net/index.php?id=83000>
- Chatterjee, A. K. (1984). *A Comprehensive History of Jainism (1000 A.D. to 1600 A.D.)* (Vol. II). Calcutta: Firma KLM Private Limited.
- Dayal, P. P. (1902). *Jain Itihaas*. Ambala: Matba Sat'bhoshan.
- Dwivedi, A. (2010-2011). Uniqueness of the Magadhan School of Art in the Jaina-Iconography. *Proceedings of the Indian History Congress*. 71, pp. 1088-1094. Indian History Congress.
- Farquhar, J. N., & Griswold, H. (1915). *The Religious Quest of India*. Dublin: Oxford University Press.
- Flugel, P., & Ahmad, M. (2018). An Exploratory Survey of The Jaina Heritage in Pakistan. *Jaina Studies*, pp. 26-32.
- Gait, E., C.S.I, C.I.E, & I.C.S. (1913). *Census Of India, Vol (I), Part II-Tables*. Calcutta, India: Superintendent Government Printing.
- *Gazetter of the Multan District 1923-24*. (1926). Lahore, Punjab, Pakistan: Sang e Meel Publications.
- Gupte, R. S. (1972). *Iconography Of The Hindus Buddhists and Jains*. Bombay: D.B. Taraporevala Sons & CO. Private LTD.

- Huntington, S. L., & Huntington, J. C. (2006). *The Art of Ancient India*. London: WeatherHill Boston.
- Jain, C. R. (1974). *Fundamentals of Jainism*. U.P.: Veer Nirvan Bharti.
- Jain, S. L. (2006). *ABC of Jainism*. Agra: Maitree Samooh.
- Jaini, J. (1916). *Outlines of Jainism*. Cambridge University Press.
- Khan, K. A. (1933). Census of India, 1931 Vol XVIII. *Punjab Part II, Tables*. Lahore, Punjab, India: Civil and Military Gazetts Press.
- L. Middleton, I., & S.M. Jacob, I. (1923). Census Of India, 1921. Vol (XV). *Punjab and Delhi Part I Report*. Lahore, India: Civil and Military Gazetts Press.
- Multan District (1923-24). (1926). *Punjab District Gazetteers, Vol. VII, Part-A*. Lahore, Punjab, Pakistan.
- Nahar, P. C. (1917). *An Epitome of Jainism*. Calcutta: H. Duby Ghulab Kumar Library.
- Prasad, B. S. (1995). *A Comparative Study of Jainism and Buddhism*. Delhi: Sri Satguru Publications.
- Prasad, P. (1993). The Jain Community in the Delhi Sultanate. *Proceedings of The Indian History Congress. 54*, pp. 223-230. Indian History Congress.
- Punjab District Gazetteers, Vol XXXIII (B). (1907). *Multan District, Statistical Tables, With Maps 1904*. Punjab, Pakistan: The Punjab Government.
- Qaiser, I. (2017). *Ujarray Daraan Dy Darshan*. Lahore: Pakistan Punjabi Adabi Board.
- Rai, L. L. (1925). *Historical Facts About Jainism*. Bombay: The Jain Association of India.
- Rao, S. R. (1997). *Indian Temple Traditions*. Bangalore: UBS Publishers Distributers LTD.
- Rowland, B. (1953). *The Art and Architecture of India: Buddhist, Hindu, Jain*. Pinguin Books.
- Roy, A. K. (1984). *A History of Jains*. New Delhi: Gitanjali Publishing House.
- Shah, S. (n.d.). *The Traditional Chronology of Jainas*.
- Shah, U. P. (1970). A Parshvanatha Sculpture in Cleveland. *The Bulletin Of The Cleveland Museum of Art*, 57(9), 303-311.
- Shah, U. P. (1998). *Studies In Jaina Art*. Varanasi: Parsvanatha Vidyapitha.
- Vijay, M. K. (1957). *Jainism in Nutshell*. Ahmadabad: Babulal Bhagwanji Mehta.
- Warren, H. (1916). *The Library of Jaina Literature "Jainism"* (Vol. VI). Allahabad: The Central Jaina Publishing House Arrah.
- Wiley, K. L. (2006). *The A to Z of Jainism*. New Delhi: Vision Books PVT. Ltd.

Arch/415: Archaeological Conservation

Type: Elective

Credit Hours: 3

Pre-requisites: None

Objectives

- After completing this course, the student would get familiarized with the basic techniques, principles of conservation, ancient materials, and conservation problems faced by the moveable and immoveable archaeological heritage

Course Contents

1. Introduction

- Definition and terminology
- Conservation ethics
- The process of conservation
- Pre-excavation considerations
- Field laboratory
- First-aid treatment to archaeological objects
- Environmental control of excavated artefacts
- Different types of materials used for the conservation and restoration of archaeological artefacts
- Conservation in practice: a collaborative exercise.

2. Simple Chemistry: Definition of Basic Terms

- Acid, Base, Alkali, pH
- Humidity: relative humidity, micro-organisms
- Temperature
- Light and its units
- Conductivity
- Atmospheric pollution.

3. Agents of Deterioration and Preservation

- Introduction
- Organisms/Micro-organisms
- Animals and plants

- Archaeological environments
- Agents of decay
- Water, Oxygen, acidity and alkalinity, redox potential, salts
- Temperature
- Conditions in archaeological environments for preservation.

4. General Techniques of Conservation

- Siliceous and related materials
- Metals
- Organic materials
- Preservation of archival materials: paper conservation

Recommended Readings

- Agrawal, O.P. (1999). *Care and Preservation of Museum Objects, National Research*.
- (19977). *Laboratory for Conservation of Cultural Property*. Lucknow.
- Cronyn, J. M. (1989). *Elements of Archaeological Conservation*. London.
- Dowman, E. A. (1970). *Conservation in Field Archaeology*. London.
- Hamilton, Donny L. (1999). *Methods of Conserving Archaeological material from underwater sites*. Conservation Research Laboratory Center for Maritime Archaeology and Conservation.
- Hodges, H., ed. (1987). *In Situ Archaeological Conservation*. Santa Maria.
- Sandra, D. (2003). *Conservation and Restoration of Glass*. Butterworth-Heinemann.
- Smith, C. W. (2003). *Archaeological Conservation Using Polymers: Practical Applications for Organic Artifact Stabilization*. Texas.
- Teutonico, Jane Marie. (1988). *A Laboratory Manual for Architectural Conservation*. Rome: ICCROM.
- Thomson, G. (1978). *The Museum Environment: Conservation in the Arts, Archaeology and Architecture Series*. London.
- UNESCO. (1972). *Master Plan for the Preservation of Mohenjo Daro*.
- *Handbook of Museum Conservation*.
- (1968). *The Conservation of Cultural Property, with Special Reference to Tropical Conditions*. Paris.

Semester-VIII

Course Code	Name of Subject	Credit Hours
ARCH421	MAJOR-XII: Sikh and Colonial Heritage of Punjab	3
ARCH/422	ELECTIVE-III (within MAJOR): Study of Archives	3
ARCH/423	ELECTIVE-IV (within MAJOR): Heritage Management	3
ARCH/424	Major-XIII: Thesis	6
	Total Credit Hours	15

ARCH/421: Sikh and Colonial Heritage of Punjab**Type: Major****Credit Hours: 3****Pre-requisites: None****Course Contents****1. Sikh Architecture**

- **Introduction**
- Sikh Period: an overview
- Characteristic features of Sikh architecture
- Different styles of the Sikh architecture

2. Sikh Monuments in Punjab

- Gurduwara
- Samadhi
- Havelis
- Shrines

3. British Architecture

- Introduction
- Colonial Period: an overview
- Characteristic features of the colonial architecture
- Different styles of the British colonial architecture
- Classification of Colonial Architecture

4. Colonial Monuments in Punjab

- Churches
- Markets
- Banglows
- Clock-towers
- Hospitals
- Educational institutions
- Judicial buildings
- Government buildings
- Museums and
- Roads and bridges
- Railway stations
- Post-office

Recommended Reading

- Brown, Percy. (1942). *Indian Architecture: Islamic Period*. Bombay.
- Chaudhry, Nazir. Ahmad. (2000). *A Short History of Lahore: And Some of Its Monuments*. Lahore: Sang-e-Meel Publications.
- Cunningham, J.D. (1955). *History of the Sikhs*, Delhi.
- Khan, M. W. (2000). *Sikh Shrines In Pakistan* . Delhi : Kalpaz Publisher .
- Kipling, J. L., & Thornton, T. H. (2002). *Lahore As It Was: Travelogue, 1860*. Lahore: National College of Arts.
- Lari, Yasmeen., & Lari, S. Mihail. (1996). *The Dual City of Karachi: During the Raj*. Karachi: Heritage Foundation and Oxford University Press.
- Latif, S.M. (1992). *Lahore: Its History, Architectural Remains and Antiquities*. Lahore: Sang-e-Meel Publications.
- Metcalf, Thomas. R. (1989). *An Imperial Vision: Indian Architecture and Britain's Raj*. London: Faber and Faber.
- Mumtaz, Kamil. Khan. (1985). *Architecture in Pakistan*. Singapore: Concept Media.
- Steinbach, C. (2005). *The Punjab*. Lahore: Sang e Meel Publications.
- Vandal, P. V. (2006). *The Raj Lahore and Bhai Ram Singh*. Lahore: Research and Publication Centre National College of Arts.

ARCH/ 422: Study of Archives

Type: Elective

Credit Hours: 3

Pre-requisites: None

Aims & Objectives

Archives are a compulsory component of research in history. Most of Basic Documents/Primary Sources are shelved in different places called Archives. New dimensions of historical events are probed with the help of Archival material which testifies that reality as No Document, No History. Therefore, this is necessary for researchers to know about places/Archives and the material lying in these Archives.

Course Content

1. Defining Archives

- Primary Sources
- Importance/Why a country needs Archives?
- Record-Maintaining...Cataloguing
- Kinds of Records
- Methods of Preservation
- Administration and Archives

2. Archives in Pakistan

- **Punjab Archives, Civil Secretariat Lahore**
- Mughal Period----
- Mutiny Papers
- Maharaja Ranjit Singh Papers
- Record of British Period...(Provincial)
- Partition Records

3. Archeological Archives

- Lahore Museum
- Lahore Fort
- Taxila Museum etc.

4. National Documentation Centre, Cabinet Division, Islamabad

- Cabinet Division
- Secret Intelligence Police Reports (Punjab, etc.)

- Record of British Library London in Microfilms
- Record regarding Freedom Movement
- Record on Princely States and Provinces
- Personal Papers (Major Short Papers, Glancy Papers, Linlithgow Papers)

5. Private Archives

- Faqir Library, The Mall, Lahore

6. Newspapers Archives

- Basic records at offices of newspapers (press releases, statements, etc.)

Recommended Readings

- Laura Millar. (2010). *Archives: Principles and Practice*. New York: Neal Schuman Publishers.
- Cheryl Avery & Mona Holmlund (eds). (2010). *Better Off Forgetting? Essays on Archives, Public Policy and Collective Memory*. Toronto: Toronto University Press.
- Michael Ray Hill (2009). *Archival Strategies and Techniques*. London.
- *Graduate Archival Research Hawaiian Studies 602*, fall 2011.
- Professor Gesa E Kirsch PhD (Editor), *Beyond the Archives: Research as a Lived Process*.

ARCH/ 423: Heritage Management

Type: Elective

Credit Hours: 3

Pre-requisites: None

Course Contents

1. Introduction

- Conservation, Preservation and Restoration
- Ethics of conservation
- Principles of Conservation

2. International Charters of Conservation for the conservation and restoration of Archaeological sites and monuments

- The Venice Charter 1964.
- The Florence Charter 1981.
- The Washington Charter 1987.
- Charter for the protection and Management of the Archaeological Heritage 1996.
- The Burra Charter (The Australian National Committee of ICOMOS ,1999)

3. Documentation of Archaeological Sites/Monuments.

- Photographic Documentation.
- Plane Table Survey.
- Triangulation.
- Theodolite.
- Total Station.

4. Materials

- Study of different materials like Baked Brick, Unbaked Brick, Lime, Stone, Mud and Wood.
- Chemical Analysis of different mortars used by the builders in the construction of old buildings.

5. Factor Contributing to the Deterioration of Monuments / Sites

a.Man Made Damages:

- Exhaust of vehicles, Fire, Encroachment, Faulty services like water supply and sewer lines, Traffic vibration. Industrial pollution and defective conservation work.

b.Natural Damages:

- Sun light, Thunderstorm, Winds, Windblown sand, Floods, Snow, Salinity, Rising of water table, Rains, Plants, animals and Earthquakes.

1. Steps for the Conservation

- i. Study of Symptoms.
- ii. Identification of Problems.
- iii. Treatment.

Recommended Readings

- Agrawal, O.P. (1999). *Care and Preservation of Museum Objects, National Research.*
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ARCH/424: Thesis**Type: Major****Credit Hours: 6****Pre-requisites: None**

