CURRICULUM

FOR

BS SOCIAL SCIENCE OF HEALTH

At

NUMS DEPARTMENT OF SOCIAL AND BEHAVIORAL SCIENCES

NATIONAL UNIVERSITY OF MEDICAL SCIENCES RAWALPINDI



RATIONALE

It is a fact beyond any doubt that health and disease are related to biology at least as much as they are related to economics, politics, ecology, society and culture. That social, behavioral, and cultural aspects of health and the etiology of diseases are deeply rooted is evident from the study of medical history. The realization of the importance of socio-cultural and behavioral factors to health reached its peak in the West during the Industrial Revolution in the 19th century led by figures like Villerme in France and Virchow from Germany. (Landy 1977: 14). Despite early realizations, modern medicine remained and continued to be preoccupied with specific micro-organic agents which were the direct and immediate causes of disease. In more recent years, however, at least in developed societies, from sports sociologists to public health experts, from those interpreting medical statistics to those evaluating policies for care in old age, social scientists are working hard to make sure that health, leisure and social care services work to best effect. Under the broad umbrella of arts and health, several disciplines have emerged. Creative arts therapies were established between the 1930s and 1960s in the United States; and arts in medicine, also commonly referred to as arts in healthcare or arts in health, began to emerge as a discipline in the 1980s. A third discipline, arts in public health, is emerging as well in alignment with the national and global priority to enhance population health through wellness and prevention.

However, in developing countries like Pakistan, it is even more important to understand the social, behavioral, and economic reasons behind poor health. In this scenario the establishment of Faculty of Social Sciences and Humanities at NUMS is pivotal. Following the broader vision of NUMS - improving quality of health care by understanding through research and education – the focus of Faculty of Social Sciences and Humanities is on a multi-disciplinary approach to health and quality research. For a multi-disciplinary approach not only, all disciplines of social sciences but also biomedicine are integrated both in teaching and research. There will be a common BS program for all social sciences whereas for MPhil and PhD optional courses could be taken from disciplines other than one's mother discipline. The health-related topics for research are to be chosen directly, in collaboration with doctors, hospitals or given by the govt.

"The prevalence and severity of microbial diseases are conditioned more by the ways of life of the persons afflicted than by the virulence and other properties of the etiological agents. Hence the need to learn more of man and his societies in order to try to make sense of the patterns of his diseases." (Rene Dubos 1965)

"In reality, if medicine is the science of the healthy as well as of the ill human being (which is what it ought to be), what other science is better suited to propose laws as the basis of the social structure, in order to make effective those which are inherent in man himself? ... Medicine is a social Science in its bone and marrow." (Rudolph Virchow 1849)

Revised Curriculum Development Committee

- 1. Dr. Muhammad Azam Chaudhary (Anthropology), Dean Faculty of SSH
- 2. Dr. Arif Mahmud (Geography) Associate Professor, HoD Department of Social and Behavioral Sciences
- 3. Dr. Yasir Mehmood (Economics) Assistant Professor
- 4. Dr. Abdul Qadar (Social Anthropology) Assistant Professor
- 5. Dr. Maria Imtiaz (Mathematics)- Assistant Professor
- 6. Dr. Amjad Sohail (Philosophy) Assistant Professor
- 7. Dr. Zahid Ahmed (History) Assistant Professor
- 8. Ms. Sara Shafiq (Anthropology) Lecturer
- 9. Ms. Taskeen Mansoor (Anthropology) Lecturer
- 10. Ms. Salma Naz Khattak (English) Lecturer
- 11. Ms. Misbah Obaid (English) Lecturer

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BS 4 – Year (8 Semesters) Program in Social Science of Health

Introduction of the Program

This is a multidisciplinary program that explores health-related issues using the analytical lenses offered by the various disciplines of social sciences. The program gives understanding, develop insight and help students to conceptualize social, cultural, environmental, political, behavioral and economic conditions that affect the health and wellbeing of wider communities. It foresees to develop learning skills in students to plan, implement and evaluate health policies and projects, undertake health education initiatives, use media, engage with communities and develop advocacy strategies. The teaching faculty will consist of specialists from field of economics, political studies, psychology, sociology, history, public health, geography, media sciences and technology to give a holistic interdisciplinary perspective on health issues. The interdisciplinary nature of the program is conducive to learn skills outside the classroom through community engagement.

The essence of the program is interdisciplinary research in health, social sciences, and Humanities which enhance understandings of health in terms of cultural perspectives.

Vision of the Program

BS program in Social Science of Health envisions betterment of humanity at large in social milieu of health.

Mission of the Program

BS program in Social Science of Health aims at understanding the relationship between health and human society through analytical lens of social science disciplines.

Objective of the Program

- To develop an understanding of the health-related issues from multidisciplinary perspective.
- To create platforms for multidisciplinary researches between social scientists and health care professionals.

Learning Outcomes of the Program

A BS graduate of Social Science of Health will be able to:

- Conduct multidisciplinary researches in the field of health
- Develop an insight to understand contemporary health conditions in a variety of social and medical settings
- Develop core disciplinary insights from field of anthropology, economics, political studies, psychology, sociology, history, public health, and geography applied to specific current health disparities.
- Demonstrate the ability to critically dialogue about the social, economic, political, psychological and cultural dimensions of health.

Scope Regarding Market, Social and Employment Perspective of Program

- Medical social workers in hospital, community, specialized medical settings, government or health sector organizations
- Health educators (health awareness and promotion)
- Patient rights advocates
- Health care administrators in diverse health settings
- Clinical outreach officers (health researchers)
- Future career path as behavioral sciences faculty in medical and dental colleges

Entry Requirement of the Program

- F.Sc (Pre-Medical or Pre-Engineering), F.A., ICS, I.Com, A Levels, High School Diploma, International Baccalaureate or equivalent qualification (Equivalence certificate from IBCC required in case of foreign qualification)
 - Minimum score 50% aggregate marks
- NUMS Admission Test with minimum 50% of cumulative score
- Interview

Layout for BS (4 Years) in Social Science of Health

Duration: Maximum 4 Years (8 Semesters)		
Semester duration: 16-18 weeks		
Categories	Number of Courses	Credit Hours
Compulsory Courses:	9	25
General Courses:	9	27
Foundation Courses:	9	27
Major Courses including research and internship	11	33
Electives	4	12

Thesis-6 credit hours

During the final year a student will undertake an undergraduate thesis of 6 credits under supervision of a faculty member.

Summer Internship- 3 credit hours

Students will be encouraged to do internship in a relevant academic, research, business, health or development sector organization

Total Credit Hours:	124 (HEC requirement of minimum 124 Cr. Hrs)
Program Type:	Regular Morning

Table of Specification

S.no	Component	Percentage
1	Quizzes	05%
2	Sessional Examination	10%
3	Mid Semester Examination	25%
4	Assignments/Presentations/Practical	20%
5	End Semester Examination	40%

^{*} For each course, these specifications will be decided by course instructor in collaboration with faculty

LIST OF COURSES

Compulsory Courses

Course Code	Course Title	Credit Hrs.
AHS-611	English-I	3 (3+0)
AHS-621	English II	3 (3+0)
AHS-631	English III	3 (3+0)
AHS-612	Pakistan Studies	2 (2+0)
AHS-613	Mathematics / Statistics	3 (3+0)
AHS-622	Introduction to Computer	3 (3+0)
SBS-623	Pakistani Society and Culture	3 (3+0)
AHS-632	Islamic Studies/Ethics for Non-Muslims	2 (2+0)
SBS-641	Philosophy of Health	3 (3+0)
	Total	25 cr hrs

Interdisciplinary General Courses

Course Code	Course Title	Credit Hrs.
SBS-614	Introductory Geography (General I)	3 (3+0)
SBS-615	Introduction to Anthropology (General II)	3 (3+0)
SBS-624	Introduction to Economics (General III)	3 (3+0)
SBS-625	Introduction to Psychology (General IV)	3 (3+0)
SBS-635	Introduction to Sociology (General V)	3 (3+0)
SBS-633	Introduction to History (General VI)	3 (3+0)
SBS-634	Introduction to Philosophy (General VII)	3 (3+0)
SBS-642	Political Science and Governance	3 (3+0)
	(General VIII)	
SBS-643	Law and Human Rights (General IX)	3 (3+0)
	Total	27 cr hrs

Foundation (Core) Courses

Course Code	Course Title	Credit Hrs.
SBS-616	Introduction to Public Health (Foundation	3 (3+0)
	I)	
SBS-626	Gender and Health (Foundation II)	3 (3+0)
SBS- 665	Community and Medical Social Work	3 (3+0)
	(Foundation III)	
SBS-644	Health Economics (Foundation IV)	3 (3+0)
SBS-645	Anthropology, Healing and Religion	3 (3+0)
	(Foundation V)	
SBS-651	Research Methodology (Foundation VI)	3 (3+0)

SBS-652	Social Theories (Foundation VII)	3 (3+0)
SBS-661	Hospital Management (Foundation VIII)	3 (3+0)
SBS-662	Health Psychology (Foundation IX)	3 (3+0)
Total		27 cr hrs

Major Courses

Course Code	Course Title	Credit Hrs.
SBS-653	Health Communication and Mass Media	3 (3+0)
	(Major I)	
SBS-654	Introduction to Biomedicine (Major II)	3 (3+0)
SBS-655	Health Informatics (Major III)	3 (3+0)
SBS-663	Advanced Methods in Health Research	3 (3+0)
	(Major IV)	
SBS-671	History of Medicine (Major V)	3 (3+0)
SBS-672	Globalization and Health (Major VI)	3 (3+0)
SBS-655	Health and Environment (Major VII)	3 (3+0)
SBS-699a	Research Project I	3 (0+3)
SBS-699b	Research Project II ¹	3 (0+3)
SBS-681	Health Policy and Planning (Major VIII)	3 (3+0)
SBS-600	Internship	3 (0+3)
	Total	33 cr hrs
Elective Course	s	•
Course Code	Course Title	Credit Hrs.
SBS-601	Geography of Health	3 (3+0)
SBS-602	Population Dynamics and Health	3 (3+0)
SBS-603	Health Administration	3 (3+0)
SBS-604	Logic and Critical Reasoning	3 (3+0)
SBS-605	Entrepreneurship	3 (3+0)
SBS-606	Cyborg Anthropology	3 (3+0)
SBS-607	Health Informatics	3 (3+0)

¹ Research project of 6 credit hours will be evaluated at the end of 8th semester

Scheme of Studies

First Semester

Course Code	Course Title	Credit Hrs.
AHS-611	English-I (Compulsory I)	3 (3+0)
AHS-612	Pakistan Studies (Compulsory II)	2 (2+0)
AHS-613	Mathematics/ Statistics (Compulsory III)	3 (3+0)
SBS-614	Introductory Geography (General I)	3 (3+0)
SBS-615	Introduction to Anthropology (General II)	3 (3+0)
SBS-616	Introduction to Public Health (Foundation I)	3 (3+0)
	Total	17 cr hrs

Second Semester

Course Code	Course Title	Credit Hrs.
AHS-621	English-II (Compulsory IV)	3 (3+0)
AHS-622	Introduction to Computer (Compulsory V)	3 (3+0)
SBS-623	Pakistani Society and Culture (Compulsory VI)	3 (3+0)
AHS-624	Islamic Studies / Ethics for Non-Muslims	2 (2+0)
	(Compulsory VIII)	
SBS-625	Introduction to Psychology (General IV)	3 (3+0)
SBS-626	Gender and Health (Foundation II)	3 (3+0)
	Total	17 cr hrs

Third Semester

Course Code	Course Title	Credit Hrs.		
AHS-631	English-III (Compulsory VII)	3 (3+0)		
SBS-632	S-632 Introduction to Economics (General III) 3 (3+0)			
SBS-633	Introduction to History (General VI)	3 (3+0)		
SBS-634	Introduction to Philosophy (General VII)	3 (3+0)		
SBS-635	Introduction to Sociology (General V)	3 (3+0)		
	Total 15 cr hrs			

Fourth Semester

Course Code	Course Title	Credit Hrs.
SBS-641	Philosophy of Health (Compulsory IX)	3 (3+0)
SBS-642	Political Science and Governance (General VIII)	3 (3+0)
SBS-643	Law and Human Rights (General IX)	3 (3+0)
SBS-644	Health Economics (Foundation IV)	3 (3+0)
SBS-645	Anthropology, Healing and Religion (Foundation V)	3 (3+0)
	Total	15 cr hrs

Fifth Semester

Course Code	Course Title	Credit Hrs.		
SBS-651	Research Methodology (Foundation VI)	3 (3+0)		
SBS-652	Social Theories (Foundation VII)	3 (3+0)		
SBS-653	Health Communication and Mass Media (Major I)	3 (3+0)		
SBS-654	Introduction to Biomedicine (Major II)	3 (3+0)		
SBS-655	Health and Environment (Major VII)	3 (3+0)		
	Total 15 cr hrs			

Sixth Semester

Course Code	Course Title	Credit Hrs.	
SBS-661	Hospital Management (Foundation VIII)	3 (3+0)	
SBS-662	Health Psychology (Foundation IX)	3 (3+0)	
SBS-663	Advanced Methods in Health Research (Major IV)	3 (3+0)	
SBS-664	Medical Anthropology	3 (3+0)	
SBS-665	Community and Medical Social Work	3 (3+0)	
Total 15 cr hrs			

Seventh Semester

Course Code	Course Title	Credit Hrs.		
SBS-671	History of Medicine (Major VII)	3 (3+0)		
SBS-672	S-672 Globalization and Health (Major VIII)			
SBS-699-a	SBS-699-a Research Project I (Major IX)			
Select any two electives from the list				
(Elective I)	(Elective I) 3 (3+0)			
(Elective II) 3 (3+0)				
Total 15 cr hrs				

Eighth Semester

Course Code	Course Title	Credit Hrs.		
SBS-681	Health Policy and Planning - (Major XII)	3 (3+0)		
SBS-699-b	Research Project II (Major X)	3 (0+3)		
SBS-600	Internship (Major XI)	3 (0+3)		
Select any two electives from the list				
(Elective III) 3 (3+0)				
(Elective IV) 3 (3+0)		3 (3+0)		
Total 15 cr hrs				

Elective Courses				
Course Code	Course Title	Credit Hrs.		
SBS-601	Geography of Health	3 (3+0)		
SBS-602	Population Dynamics and Health	3 (3+0)		
SBS-603	Health Administration	3 (3+0)		
SBS-604	Logic and Critical Reasoning	3 (3+0)		
SBS-605	Entrepreneurship	3 (3+0)		
SBS-606	Cyborg Anthropology	3 (3+0)		
SBS-607	Health Informatics	3 (3+0)		

Assessments and Examinations

- Sessional & Mid Semester results of the students shall be sent to Academic Directorate / Examination Directorate by concerned institute/department.
- End Semester exam will be taken by the University
- Students who hold certificates of 75% attendance will be allowed to sit for the exam
- All students will be assessed during the courses and at end of semester examinations as per NUMS grading system policy

	Weightage	Marks	Assessment Tool
Quizzes	05%	5	SAQs/SEQs
Sessional Examination	10%	10	SAQs/SEQs
Mid Semester Examinations	25%	25	SAQs/SEQs
Assignments/Presentations	20%	20	Presentation/Viva/Report
Final End Semester Examination	40%	40	MCQs 5marks
			SAQs/SEQs 35marks
Total	100%	100	

- a. 2.00 CGPA will be the qualifying score for the award of degree
- b. The results and transcript will be issued by the Controller of Examination, NUMS

Faculty Detail/Qualifications

S	Name	Designation	Status	Qualification	Date of
#					Joining
1.	Dr. Arif	Associate	Permanent	D. Phil (Human Geography),	01-02-2019
	Mahmud	Professor		MSc (Geography), MSc (I.R)	
2.	Dr. Abdul	Assistant	Permanent	PhD Social Anthropology and	31-01-2019
	Qadar	Professor		Ethnology, MPhil Pakistan	
				Studies	
3	Dr. Yasir	Assistant	Permanent	PhD Economics	20-02-2019
	Mehmood	Professor			
4	Dr. Maria	Assistant	Permanent	PhD Mathematics	10-04-2019
	Imtiaz	Professor			
5	Dr. Amjad	Assistant	Permanent	PhD Philosophy	1-03-2021
	Sohail	Professor			
6	Dr. Zahid	Assistant	Permanent	PhD History	11-05-2018
	Ahmed	Professor			
7	Sara Shafiq	Lecturer	Permanent	MPhil Anthropology	18-06-2019
8	Taskeen	Lecturer	Permanent	MPhil Anthropology	18-06-2019
	Mansoor				
9	Ms. Salma Naz	Lecturer	Permanent	MPhil English	12-03-2021
	Khattak				
10	Ms. Misbah Naz	Lecturer	Permanent	MPhil English	11-03-2021
	Khattak				

SEMESTER I

ENGLISH-I

Course code: AHS-611 Title: English-I Credit Hours: 3 (3+0)

Description of Course

Functional English (English I) is a 3-credit-hour course with 3+0-hour lectures per week. This course is appropriate for students from all backgrounds. The core content up to a 16-week course is designed to give basic knowledge of the English language and improves their reading, writing, listening, and presentation skills. The course will give an opportunity for the student to use the English language for communication and expression of their ideas.

Learning Outcomes

By the end of this course students will be able to:

Develop sufficient vocabulary and grammar for effective writing, reading, listening and speaking for correct and fluent English

Course Content

I. Vocabulary

Dictionary skills (dictionaries usage, Denotations & Connotation)

Synonyms and Antonyms

Root words

Prefixes and suffixes

 $Homonyms\ \&\ paronyms,\ homophones,\ homographs,\ heteronyms,$

capitonyms, oronyms

II. Grammar

Parts of speech

Articles

Tenses

Active and passive voices

Conditionals

III Writing

Sentence and its kinds

Subordinate and coordinate clauses.

Noun clauses, Adjectival

clauses, Adverbial clause

Narrative writing

Cause and effect writing

Descriptive writing

IV. Reading Comprehension

Skimming

Scanning

Inferential reading

Active and Analytical Reading

Cause and effect

Book Reviews

.V- Speaking / Listening

Presentation Skills

Types of presentation

Verbal and non-verbal communication

How to prepare power point slides How to make an effective presentation

Recommended Books:

Note: Extensive reading is required for vocabulary building

a. Grammar

- 1. Practical English Grammar by AJ. Thomson and AV Martinet. Exercises 1. Third edition. Oxford University Press. 1997. ISBN 0194313492
- 2. 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 Francoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 0 19 435405 7 Pages 20-27 and 35-41.

c. Reading/Comprehension

- Reading. Upper Intermediate. Brain Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 9 453402 2.
- Fanselow, J. (1987) Breaking Rules. New York: Longman.
- Goh, C.M. (2007) Teaching Speaking in the Language Classroom. Singapore:
- SEAMEO-RELC.
- Harmer, J. (2001) The Practice of English Language Teaching. Harlow: Pearson
- Nation, P. (2002) Managing Vocabulary Learning. Singapore: SEAMEO-RELC.
- Richards, J.C. (2005) Communicative Language Teaching Today. Singapore: RELC.
- Swan, M. (2005) Practical English Usage. Oxford: OUP.
- Thornbury, S. (2005) Grammar. Oxford: OUP. Ur, P. (1996) A Course in Language Teaching. Cambridge: CUP.

Assessment

Nature of Examination	Assessment Tool	Marks
Vocabulary	SEQs	5+5
Writing	SEQs	5+5
Grammar	SEQs	5+5
Reading	SEQs	5+5
Total		40 Marks

PAKISTAN STUDIES

1. Course Code: AHS-612	Title: Pakistan Studies	Credit Hours: 2 (2+0)

2. Description of Course

This two-credit hour course highlights religious, cultural, political and economic aspects of Pakistan as a nation. It prepares students to understand the religious identity and ideology of Pakistan amongst the community of nations. It also instills into the young minds a strong feeling of Muslim nationalism, and justification for the demand of Pakistan. Students are encouraged to look at issues of justice, peace, gender discrimination and Constitution of Pakistan and determine their roles as effective citizens. A portion of the course deals with formal group discussions and project presentations that will ripen leadership potentials among the students.

Year/Semester in which this course is offered:

Semester 1 Year 1

B. Learning Outcomes

By the end of this course students will be able to:

- Understand the Ideological and historical struggle in the creation of Pakistan
- Review and comparing the political, legislative and constitutional processes of Pakistan
- Analyzing Pakistan's Foreign Policy and its relations with External World.

Discuss & Explain the Contemporary Issues, Socio-Cultural and Ethno-Sectarian diversity of Pakistan.

C. Course Details

Learning Objectives	List of Topics	Weightings	Assessment tool
Understanding of the historic background of the region and Pakistan	General introduction to Pakistan Studies as Subject	5%	MCQs/SAQs
	 Indus Valley Civilization Theoretical understanding of Ideology of Pakistan (Iqbal and Jinnah) 		
Review and compare the achievements of different ministries	• First Decade of Pakistan (1947-1958)	5%	MCQs/SAQs Class Discussion
Analyze the achievements of Ayub government and the reasons of the East Pakistan crises	Ayub EraCreation of Bangladesh	5%	MCQs/SAQs Class Discussion
Review and compare the achievements of different ministries	 Bhutto as a Martial Law Administrator Bhutto as a Prime Minister Making of 1973 constitution Zia Era 	10%	MCQs/SAQs Class Discussion
Review and compare the achievements of different ministries	 Political Turmoil and Years of Transition 1988- 1999 Benazir's Tenure Nawaz Sharif's Tenure 	5%	MCQs/SAQs Class Discussion
Analyze Pakistan's Foreign Policy and its relations with External World	 Relations with USA, China, Russia, India and Afghanistan Relations with Muslim Countries 	5%	Assignments/ Presentations

Analyze the impact of the 'Global war on terror's' impact on Pakistan and the region	 9/11 Attack and Taliban Regime The US intervention in Afghanistan and Pakistan's Importance Implications for Pakistan 	5%	MCQs/SAQs Class Discussion
Understand the selected contemporary issues	Population growthWater ManagementSectarianism	15%	Assignments/ Presentations
As above	Public Health System	5%	Assignments/
			Presentations

D. Assessment

Nature of Examination	Weightage	Assessment Tools
Quizzes	05%	MCQs/SAQs
Sessional Examination	10%	MCQs/SAQs
Mid Semester Examinations	25%	MCQs/SAQs
Assignments/Presentations/ Practical	20%	Assignments
Final End Semester Examination(Given below)	40%	SAQs 8 40 Marks
Total	100%	

MATHEMATICS

1. Course Code: AHS-613	Course Title: Mathematics	Credit hours: 3(3+0)
2 D		

2. Description of Course:

The course is designed to increase the student's appreciation of the basic role played by mathematics in modern technology. The students will be introduced to a field which may become a source of interest in its own right and in turn will help students meet the requirements of preparing for careers in fields other than mathematics. This course will pave the way for better understanding of Mathematics by the students in their advance teaching and research programs at MS and PhD levels.

Year/Semester in which this course is offered:
1 st Semester

B. Learning Outcomes

By the end of this course students will be able to:

- Apply tools of basic Math to the concepts and techniques in their respective field
- Comprehend the core concepts of introductory mathematics ("concepts").
- Effectively communicate content of the course through both written reports and oral presentations ("scientific communication")
- Apply experience and knowledge of mathematics-1 course to analyze and solve problems related to biological systems in terms of mathematics ("problem solving and applications").

C. Course Details

Learning Objectives	List of Topics	Weightings	Assessment tools
Theme 1-Real/ Complex Numbers and their Properties		12%	

_					
•	Recall the set of real	•	Introduction about		Quiz/Assignment
	numbers as a union of		course and about		
	sets of rational and		facilitator and course		
	irrational numbers.		participants,		
•	Depict real numbers on		discussion on topics,		
	the number line.		teaching		
•	Know the properties of		methodologies and		
	real numbers.		assessment, timings,		
•	Define complex number z		helping materials		
	represented by an	•	Real Numbers,		
	expression of the		Classification of		
•	form $z a + ib$		Numbers, Basic		
•	Carry out basic operations		Operations and laws,		
	(i.e., addition, subtraction,		Number Line and the		
	multiplication and		ordering of Real		
	division) on complex		Numbers, Exponents,		
	number		Radicals		
		•	Cartesian Product,		
			Complex Number		
			System, Properties of		
			Complex Numbers,		
			Conjugate of Complex		
			Numbers, Modulus of		
			complex Numbers,		
			Properties of modulus.		
			Troperties of modulus.		
Tł	neme 2-Operations with Alg	gebr	aic Expression	12%	
•	Identify the algebraic	•	Algebraic	12%	
	expression		Expressions,		
•	Solve the degree of		Addition, Subtraction,		
	polynomial		Multiplication,		

 Solve monomial and polynomial Solve addition, subtraction, multiplication a division of alge expression 	E F E A A F	ivision of Algebraic expressions factors of Algebraic expressions, algebraic Fractions, Multiplication, Division, and addition of Algebraic fractions		
Theme 3- Matrice	es and Determinan	ts	12%	
 Represent the mathematical a world data in to Find sum and d of the matrix are product of a numatrix Use matrices to system of linear in mathematical world situation 	nd real o matrix lifference nd scalar mber and o solve the r equation al and real S jo Ir S H	Algebra of Matrices, properties of Matrices, Diagonal Matrix, Transpose of a Matrix, Symmetric Matrix, Identity Matrix Determinants, properties of Determinants, ingular Matrix, Adoint of a Matrix, proverse of a Matrix, proverse of a Matrix olution of Matrix olution and Mon Homogeneous and Mon Homogeneous inear equations matrix Method, and Gramer's Rule)		
Theme 4- Quadra	tic Equations		12%	
 Solve quadratic by using the Solve Property. Identify and perfect square to Solve quadratic by Completing Square. 	complete rinomials. be equations the E	olution of Quadratic equations, factorization Method, completing Square Method, Quadratic formula equations Reducible Quadratic equation, Solution of		

Discuss the nature of	Simultaneous		
roots	Equations of Two		
	Variables, Partial fractions.		
	fractions.		
Theme 5- Trigonometry		12%	
 Identify the hypotenuse, adjacent side, and opposite side of an acute angle in a right triangle. Determine the six trigonometric ratios for a given angle in a right triangle. Recognize the reciprocal relationship between sine/cosecant, cosine/secant, and tangent/cotangent. Use the Pythagorean Theorem to find the missing lengths of the sides of a right triangle. Find the missing lengths and angles of a right triangle. Understand unit circle, reference angle, terminal side, standard position. Determine the quadrants where sine, cosine, and tangent are positive and negative. 	 Angles, Relation Between Degrees and Radians, Trigonometric Functions, Basic Properties of Sine and Cosine, Another Four Trigonometric Functions Signs of Trigonometric Functions in Four Quadrants, Distance formula, A Fundamental Law of trigonometry, Deduction from a Fundamental Law 		
Theme 6- Sequence and Serie	es	12%	
 Form the series Obtain series corresponding to sequence 	Arithmetic Progression (A.P), Arithmetic Means (A.M), Arithmetic Series (A.S), Geometric Progression		

 Compute sum of the arithmetic and geometric series Derive relation between Arithmetic Mean and geometric Mean 	(G.P), Geometric Means (G.M), Geometric Series (G.S) • Harmonic Progression (H.P), Harmonic Means (H.M), Relations Between Arithmetic, Geometric and Harmonic Means	
Theme 7- Permutation, Comb	oination, and Binomial	12%
 Compute factorials. The student will be able to apply and calculate permutations. The student will be able to apply and calculate combinations. The student will be able to solve applications involving permutations and combinations 	 Permutation, Combination, Relation Between Permutation and combination Binomial theorem, Binomial Theorem for Rational Index 	
Theme 8 - Basics of Statistics		12%
 Calculate the mean, mode, median and range for a set of discrete data Use tally charts and tables to calculate the mean of a data set Undertake calculations with the mean Calculate or estimate mean, mode and edian from a set of grouped data. Recognizes the importance of measuring dispersion. 	 Meaning and definition of statistics, relationship of statistics with social sciences, Frequency distribution, measure of central tendency (Mean, Median, Mode, quartile, decile & percentile) Measures of dispersion (Range, inter quartile deviation mean, 	

 Explains and evaluates the measures of dispersion-Range, Quartile deviation, Mean deviation, Standard deviation. Distinguishes absolute and relative measures of dispersion. 	variance & standard deviation)		
 Plot ordered pairs on a coordinate plane. Given an ordered pair, determine its quadrant. Use coordinate pairs to graph linear relationships. Graph a linear equation using x- and y-intercepts. Determine whether an ordered pair is a solution of an equation. Solve application problems involving graphs of linear equations 	Graph of straight line, circle and trigonometric functions	04%	

D. Assessment

Nature of Examination	Weightage	Marks	Assessment Tools
Quizzes	05%		MCQs/SAQs
Sessional Examination	10%		SAQs
Mid Semester Examinations	25%		SAQs
Assignments/Presentations/ Practical	20%		Assignments
Final End Semester Examination	40%	40	SAQs 8 40 Marks

(Given below)			
Total	100%	100	

STATISTICS

Course code: AHS-613	Course Title: Statistics	Credit hours: 3(3+0)

2. Description of Course:

This course deals with statistical concepts, such as data presentation, graphs, measures of central tendency and dispersion, correlation, and index numbers. The students will be able to collect, present and analyze the data and understand techniques of data collection and data presentation by using statistical techniques. This course will help them to communicate the results of statistical work and write up the results of statistical analysis in a report consisting of a non-technical abstract for decision makers, so that they can improve their decisions.

Year/Semester in which this course is offered:

1st Semester

B. Learning Outcomes

By the end of this course students will be able to:

- Understand and be able to calculate basic statistical concepts (tabular and graphic representation of data, measures of central tendency, dispersion and asymmetry, correlation)
- Apply knowledge to solve simple tasks using computer software, such as MS Excel, SPSS.
- Acquired knowledge will be helpful to interpret the meaning of the calculated statistical results.

C. Course Details

Learning Objectives	List of Topics	Weightings	Assessment tools
Theme 1-Introduction to Statistics		12%	

 Define population, sample, ratio, proportion, parameter, statistics, sampling variables, experiment. Depict importance of statistics in various disciplines. Differentiate quantitative and qualitative variables. What is descriptive and inferential statistics. How to collect primary and secondary data. What are the sources of data collection. Define variables and classify it. 	Definition of Statistics, Population, sample, Descriptive and inferential Statistics, Observations, Data, Discrete and continuous variables, Collection of primary and secondary data, Sources, Editing of Data.		Quiz/Assignment
Theme 2-Presentation of Date	ta	12%	
	<u> </u>		
• Express basic principles	Introduction, basic		
of classification.	principles of classification		
How to construct a table	and Tabulation,		
and frequency	Constructing of a		
distribution.	frequency distribution,		
• Calculate cumulative	Relative and Cumulative		
frequency distribution	frequency distribution,		
for discrete data.	Diagrams, Graphs and their		
How to draw simple bar	Construction, Bar charts,		
diagram and multiple	Pie chart, Histogram,		
bar diagram.	Frequency polygon and		
Draw Pie diagram and	Frequency curve, Bivariate		
Histogram for discrete	frequency distribution.		
and continuous data.			
Calculate frequency			
polygon and frequency			
curve.			
Define bivariate			
frequency distribution.			
Theme 3- Measures of Centr	 	12%	
Theme 3- wieasures of Centr	at refluency	1470	

•	Differentiate arithmetic mean and weighted mean. Find the arithmetic, geometric and harmonic means for grouped and	Introduction, Different types of Averages, Quantiles, The Mode, Empirical Relation between Mean, Median and mode, Relative Merits and		
•	ungrouped data. What are the properties of arithmetic, geometric and harmonic means. Find median, quantiles and mode for data.	Demerits of various Averages.		
•	Calculate deciles, percentiles for grouped and ungrouped data. Establish empirical relationship between mean, median and mode. How to select a suitable			
	measure for central tendency. eme 4- Measures of Dispe		12%	
•	Discuss types of measures of dispersion. Identify measures of absolute variability. Compute range for grouped data, quartile, mean deviation for grouped and ungrouped data, variance and standard deviation. Identify properties of mean deviation, variance and standard deviation. Calculate coefficient of variation and other relative measures. Define moments about mean and about an arbitrary value. What is moment for grouped data.	Introduction, Absolute and relative measures, Range, The semi-Inter-quartile Range, The Mean Deviation, The Variance, Interpretation of the standard Deviation, Coefficient of variation, Properties of variance and standard Deviation, Moments and Moments ratios.	140/	
Th	eme 5- Probability and Pr	robability Distributions	14%	

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laws for events exclusion mutuallocation for exclusion mutuallocation for exclusion mutuallocation for exclusion mutuallocation for exclusion	y exclusive. ine the lity of a sample and given event. the conditional lity of a sample when one event is Recognize the ent and adent events tand random e and their ction for different Differentiate e and continuous a variables. ine the fility mass in, probability function, ate discrete and ous distributions. ize the difference in binomial	Basic concepts, Addition and multiplication rules of Probability, Conditional probability, Types of Random variables, Probability distribution, The binomial distribution, The Hypergeometric distribution, The normal distribution, Distribution of continuous random variable.		
Theme 6: 8	Sampling and San	npling Distributions	14%	
san of s des Wh diff nor san pro san cor ran by and ran	fine population, apple and types sampling igns. at is the ference between a-probability apling and bability apling? mpute simple dom sampling Lottery method I by using dom digits. fine sampling	Introduction, sample design and sampling frame, probability and non-probability sampling, sampling and non-sampling errors, sampling with and without replacement, Sampling distributions for single mean and proportion.		

 and non-sampling errors. Calculate sampling distribution of a statistic. Determine the sampling distribution of the single mean. Compute variance of the sampling distribution of the single mean. Theme 7- Hypothesis Testing 	ng	12%	
 Define the elements of a test of hypothesis. Describe statistical hypothesis, null hypothesis, alternative hypothesis, simple hypothesis and composite hypothesis. Define critical values, one-tailed test and two-tailed test. Compute errors of inference. Identify the level of significance of a test. Which steps to be followed when testing a hypothesis. Describe statistical decision rule. 	Introduction, Statistical problem, null and alternative hypothesis, Type-I and Type-II errors, level of significance, Test statistics, acceptance and rejection regions, general procedure for testing of hypothesis.		
Theme 8- Regression and C	Correlation	12%	

•	Examine relation	Introduction, cause and	
	between variables.	effect relationships, simple	
•	Define regressor and	linear regression, estimation	
	regressand.	of curve fitting, Correlation.	
•	Describe the simple	Coefficient of linear	
	linear regression and	correlation, its estimation	
	its coefficient.	and interpretation. Change	
•	Mathematically	of origin and scale.	
	formulate the simple		
	regression model.		
•	Recognize the		
	limitations of		
	regression.		
•	Explain least square		
	principle, least square		
	fit and scatter diagram.		
•	Distinguish positive,		
	negative and no		
	correlation.		
•	Examine sample		
	correlation coefficient		
	and its properties.		
•	Prove that the		
	correlation coefficient		
	is independent of the		
	origin and the scale of		
	the measurement of the		
	variables.		

Course Code: SBS - 614	INTRODUCTORY GEOGRAPHY	Cr. Hrs. 3 (3+0)
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Course Description

The objective of the course is to make students familiar with the basic concepts in Geography. This course is designed to acquaint students with the understanding of spatial variations in natural environment like landscape, climate, and hydrology; human use, adaptation to and modification of natural environment; and global environmental issues. Later part of the course will focus on different aspects of human Geography with emphasis on geographical approach to health. Students will also be introduced to the geographical methods of investigation.

Learning Objectives

• To provide basic information about the subject of Geography.

Course Content

- 1. Definition and scope of Geography
- 2. Earth, Globe and Map
 - a) Shape, size and movements of earth
 - b) Important features of globe
 - c) Main elements of map and map reading
- 3. Landscape formation
 - a) Plate Tectonics and Macro Landforms
 - b) Process of landform change
 - c) Agents of landform Change
- 4. Climatic Elements and Climatic Regions
- 5. Global Warming: Causes and Impact
- 6. Human-Environment Relationship: Theoretical Discussion
- 7. Natural Hazards: Their causes, Impact, and human response.
- 8. Population
 - a) Growth and Demographic Transition Model
 - b) Age Structure
- 9. Geography and Health

Course Outcome

After studying this course, students will be able:

• To grasp the basic concepts in geography and their significance for health.

Teaching Methodologies/Instructional Strategies

Interactive lectures/tteam-basedlearning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method).

Learning Resources

- 1. Ahmad, N., Ahmad, K. (2010). Pakistan: A study of geographical environment economy and human resources. Lahore: Azeem Academy.
- 2. Arnold, David & Guha, R. (1995). Nature, culture and imperialism. Delhi: Oxford University Press.
- 3. Bengali, K. (2003). The politics of managing water. Oxford University Press.
- 4. Dahlman, C., Renwick, W. H., & Bergman, E. (2010). Introduction to geography: People, places, and environment. (5thed.). Upper Saddle River: N.J. Prentice Hal.
- 5. Farhan, K. (2015). Geography of Pakistan, environment people and economy. Karachi: Oxford University Press.
- 6. Getis, A., Fellmann, J. D., &Getis, J. (2008). Introduction to geography. New York: Mcgraw-Hill.
- 7. Haggett, Peter. (2001). Geography: Amodern synthesis. USA: Prentice Hall.
- 8. Hussain, I.(2017). Indus Waters Treaty. Karachi: Oxford University Press.
- 9. Mihelic, L. (2010). World regional geography without sub-regions. (5th ed.). New York: W. H. Freeman & Company.
- 10. Qureshy, K.U. (1972). Geography of Pakistan. Karachi: Oxford University Press.
- 11. Strahler, A. H. (1998). Physical geography science and systems of the humans environment. New York: John Wiley & Sons.
- 12. Wai-Chung, Y. H., Coe, N. M., &Kelly, P. F. (2007). Economic geography: A contemporary introduction. New York: Blackwell Publishing.
- 13. Wood, A., & Roberts, S. (2009). Economic geography: Places, network and flows. New York: Routledge.

COURSE CODE: SBS-615 INTRODUCTION TO Cr. Hrs. 3 (3+0)
ANTHROPOLOGY

Course Description:

Anthropology is the study of human beings, taking a broad approach to understanding many different aspects of the human experience, which we call holism. From studying early human groups in the pre-historic era to formal organization of society, politics, religion, law, arts and language with a special focus on others, this course will give a comprehensive introduction to the field and sub-fields in Anthropology. The different theoretical perspectives help examine the complex diversity of the social phenomenon. Through ethnographic literature we will look at different regions of the world.

Learning Objectives:

- To explore the unity and diversity of human socio-cultural experiences
- To introduce main fields in Anthropology and their inter-relatedness and mutual inspirations
- To practice the research approaches of Anthropology

• To critically evaluate own ideas about social constructions

Course Content

- 1. What is Anthropology?
 - The Anthropological Perspective: Difference to Other Social Sciences
 - Basic Concepts: Ethnocentrism, Cultural relativism, etc.
 - Holistic Perspective
- 2. Fields of Anthropology
 - Cultural Anthropology
 - Social Anthropology
 - Archeology
 - Linguistic Anthropology
 - Applied Anthropology
 - Medical Anthropology
- 3. Anthropological Theories
 - Evolutionism
 - Functionalism
 - Structuralism
 - Interpretativism
 - Postmodernism
- 4. Anthropological Methods
 - Overview of Ethnography—Anthropological Knowledge
 - Participant Observation
 - Interviewing
 - Survey and Social Mapping
 - Oral Histories
 - Case Studies
- 5. Politics, Governance and Law
 - Politics as a Cultural System
 - Ethnicity in Pakistan
 - Anthropology of Law
 - Pakistani Politics and Law
- 6. Anthropology of Gender
 - Religion and Gender in Pakistan
 - Vartan Bhanji, the Punjabi Village Ethnography

- The Transgender in Pakistan
- 7. Social institutions: Kinship, family and marriage
 - Anthropology of Kinship: Patrilineal, Matrilineal, Endogamy, Exogamy, Incest Tabu,
 - Kinship, Family and Marriage in Pakistan
 - o The Case Study of the Punjab
 - o The Case Study of the Pushtuns
- 8. Religion and Ritual Behavior
 - Origin of religion as ideological, social and cultural order
 - Rituals, beliefs and worship
 - Sufism in Pakistan
- 9. Economic Anthropology
 - Division of Labour,
 - Reciprocity,
 - Redistribution, Potlatch and Gift Exchange in Pakistan and Comparison

Learning Outcomes:

After studying this course, students will be able:

- To develop an understanding of their own cultural values in a comparative perspective
- To develop a positive appreciation of the diversity in contemporary and past societies/cultures.

Teaching Methodologies/Instructional Strategies:

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films

Learning Resources:

- 1. Decorse, C. R., & Scupin, R. (2012). Anthropology, aglobal perspective. USA: Pearson.
- 2. Delaney, C. (2004). An experiential introduction to anthropology. Blackwell.
- 3. David, E. J. (2009). *Cultural anthropology: Global forces*, local lives. Routledge.
- 4. Ember, C. R., & Ember, M. (2009). Cross cultural research methods. New York: Altamira.
- 5. Ember, C. R., Ember, M., & Peregrine, P. N. (2011). Anthropology. Delhi: Pearson.
- 6. Ferraro, G. & Andreatta, S. (2010). *Cultural anthropology: An applied perspective*. Belmont: Wadsworth.
- 7. Golden, H. P. (2009). *Culture sketches: Case studies in anthropology*. NewYork: McGraw Hills.
- 8. Herzfeld, M. (2001). Theoretical practice in culture and society. Blackwell.

- 9. Kuper, A. (1996). Anthropology and anthropologists. Routledge.
- 10. Metcalf, P. (2005). Anthropology: The basics. Oxon: Routledge.
- 11. Rosman, A., Rubel, P.G. & Weisgrau, M. (2009). *The tapestry of culture: An introduction to cultural anthropology*. Lanham: Rowman and Littlefield.

COURSE CODE: SBS 616 INTRODUCTION TO PUBLIC Cr. Hrs. 3 (3+0) HEALTH

Course Description:

This course will provide students with the knowledge of Fundamentals of Public Health, Basic and Applied Epidemiology, Population Dynamics, Fundamentals of Infectious disease, Communicable and Non-Communicable Epidemiology, Health Policy, Health Planning and District Health Management. The goal of this course is to introduce various concepts of health, natural history of disease, epidemiological designs and its applications, demographic transition and its relationship with socioeconomics, mortality, fertility and migration, introduction to communicable and non-communicable disease epidemiology, policy and planning process, basic organization, financing and delivery of public health systems and district health care delivery system of Pakistan.

Learning Objectives:

The objectives of the course are to describe

- Basic concepts in Public Health, Epidemiology, Population Dynamics, Disease Prevention and Control, Health policy & Planning and District Health Care Delivery System.
- Epidemiology of important communicable and non-communicable diseases in Pakistan
- Policy and Planning of public health interventions in socio-cultural, political, economic and environmental context of Pakistan

Course Content:

- 1. Fundamentals of Public Health (Concept of Health & Disease):
 - a) Concept of Health & Well being
 - b) Dimensions & Determinants of Health
 - c) Indicators of health
 - d) Concepts in Health Service
 - e) Concept of Disease
 - f) Concept of Association and Causation
 - g) Natural History of Disease
 - h) Concepts of Control
 - i) Concepts of Preventions
 - i) Modes of Intervention
 - 2. Basic and Applied Epidemiology:
 - a) Introduction to Epidemiology
 - b) Measures of Morbidity

- c) Measures of Mortality
- d) Epidemiological Designs
- e) Chance, Confounding and Bias
- f) Measures of Association Validity and Reliability of study designs
- g) Screening for disease
- 3. Outbreak Investigation (Introduction and case scenarios)
- 4. Fundamentals of Infectious Disease Epidemiology
 - a) Definitions in disease transmission
 - b) Chain of Infection
 - c) Modes of Transmission
 - d) Susceptible Host
 - e) Host Defenses (Specific Defenses and Immunizing Agents)
- 5. Introduction to Sustainable Development
- 6. Introduction to Occupational Health
- 7. Population dynamics
 - a) Demographic Transition
 - b) Population Pyramid
- 8. Introduction to Health Policy and Planning
 - Policy triangle (context, process and actors)
- 9. Introduction to Health Planning
 - Concepts in Planning
- 10. Introduction to Health Systems
- 11. District Health System of Pakistan
- 12. Health Education and Promotion

Learning Outcomes:

On the completion of the course, the student will be able to

• Understand and analyze common public health challenges of Pakistan

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films

Learning Resources:

List of Textbooks, Journals, Electronic Materials (PDF versions of books and articles will be provided):

- Epidemiology-Leon Gordis
- Handbook of Epidemiology- Ahrens & Pigeot
- Basic Epidemiology-2nd Edition, WHO
- Make Health Policy-Kent Bose
- District Health Planning Manual: Toolkit for District Health Manager

SEMESTER II

ENGLISH-II

A. General Information

Course Code: AHS- 621 Title: English-II Credit hours: 3(3+0)

Description of Course

Functional English (English II) is a 3-credit-hour course with 3+0-hour lectures per week. This course is appropriate for students from all backgrounds. The core content up to a 16-week course is designed to give knowledge of basic English language and improvise their reading, writing, listening, and presentation skills. The course will give an opportunity to the student to enforce the knowledge of the English-I course and use the English language for communication and expression of their ideas.

B. Learning Outcomes

By the end of this course students will be able to:

Develop intermediate language skills for improving writing proficiency

Developing explicit and implicit comprehension skills

C. Course Details

1- Writing Process

Process writing

- Taking notes/Concept mapping
- Building outline
- Developing analysis
- Summarizing

2- Writing skills

- Translation skills
- Paraphrasing/Precis writing
- comprehension skills
- SQ3R
- developing inference

3- Academic Writing

Paragraph Writing

- Structure and parts of paragraph
- Types of writing

Essay writing

- Thesis Statement /Types of Thesis Statement
- Structure and parts of an Essay

Difference between Essay and Paragraph

4. Listening /Speaking

- Documentary/film analysis and discussion (initiating, leading and closing discussions)
- Discussion on specific topics in science and social sciences

5-Technical Writing

- Letter Writing
- Types of letters
- Curriculum Vitae (CV)
- Cover letter
- Difference between CV and Resume
- Email and Memorandum Writing

Recommended Books

- <u>Technical Communication</u>, 9th edition by Mike Markel.
- The Insider's Guide to Technical Writing by Krista Van Laan
- Keys for Writers (6th edition)-Raimes, A.
- Writer's Workplace with ReadingsScarry, Sandra, Scarry
- Academic Writing: From Paragraph to Essay-Book by Dorothy Zemach and Lisa A. Rumisek

Assessment

Content	Assessment Tool	Marks
Writing Process	SEQs	5+5
Writing Skills	SEQs	5+5
Academic Writing	SEQs	5+5
Technical Writing	SEQs	5+5
Total		40 Marks

INTRODUCTION TO COMPUTER

A. General Information

Course Code: AHS - 622	INTRODUCTION TO COMPUTER	Credit hours: 3 (2+1)

Description of Course:

The introductory course focuses on historical review of computer science and its applications using different applications including Microsoft office. Introduction to computer is application-based course which will help student effectively use computer for report writing, data analysis and data presentation.

Year/Semester in which this course is offered: **BS-2nd Year** (3rd Semester)

B. Learning Outcomes

At the end of the course, students will be able to:

- Discuss hardware and software, different components of computer and data storage devices.
- Demonstrate skills by entering, editing and analyzing numerical data using Microsoft word, excel
- Prepare theoretical reports and present their findings in scientific manner using Microsoft word, excel, PowerPoint, graph pad, endnote and online plagiarism soft wares.

C. Course Details

Learning Objectives	List of Topics	Weighting/ Assessment
.Introduction to computers	,	12% /
		MCQs/ SAQS
Objective I: Familiarize the students with basics of computers, its components and uses, World Wide Web, data storage and security.	History of computersParts of computersOperating systemsFile extensions	
	Types of computerSuper computerMini- and micro-computers	

	Cloud computers	
	Computer systems	
	Hardware	
	• Software	
	• Input and output	
	devices	
	Storage devices	
	Interactive computing	
	and networks	
	Types of computer	
	networks	
	 Network resources 	
	Computer viruses	
		12%/
I. Application Software- I		MCQs/Assignment
Objective II:	I.Microsoft Excel	
Discuss the applications of Microsoft	II.Data entry	
Excel	III.Data editing	
Demonstrate the skills in the use of	IV.Data formatting	
spread sheet/data base		
	Microsoft Excel	
	Formula and	
	functions	
	 Charts and graphs 	
II. Application in scientific writing-I	<u>I</u>	10%/
		MCQs/Assignment
Objective III:	Graph pad	
Discuss the main concepts of graph	Data entry and	
pad	formatting	
Prepare students to effectively use this	• Graphs	
application for the completion of their		
assigned scientific tasks.		
	Graph pad	
	Statistical tests	

Mid-Term		
III. Application Software –II		12%/ MCQs/Assignment
 Objective IV: Discuss the applications of Microsoft Word Demonstrate the skills in the use of a word processor 	 Microsoft Word Features of a word processor window Creating, editing, formatting a document Bullets, page numbers, Headers and Footers 	
IV. Application in scientific writing-II		10%/ MCQ/SAQ/ Assignment
 Objective V: Discuss the main concepts of Plagiarism evaluation soft wares Prepare students to effectively use this application for the completion of their assigned scientific tasks. 	 Literature search References and bibliography 	
	Plagiarism evaluation software	
V. Application Soft wares III		12%/ MCQ/SAQ/ Assignment
Objective VI: Discuss the applications of Microsoft Power point Demonstrate the skills in the use of presentation software VI. Application in scientific writing-II	 Microsoft Power point Features of power point window Formatting Animations 	

Prepare students to effectively use this application for the completion of their assigned scientific tasks.	Poster designing in Power point	12%/ Assignment
Algorithms		20% MCQ/SAQ/ Assignment
Objective VIII: Discuss the significance of computer science and its applications in various fields	IntroductionRepresentation	
	Databases and web tools	

Practical sessions
Installation of computer components
Antiviruses and data backup
Data analysis using Excel
Statistical analysis using Graph-pad
Report writing using MS-word
Referencing using endnote or any publicly available software
Plagiarism evaluation
Preparation of the power point presentation
Power-point posters preparation

D. Assessment

Nature of Examination	Weightage	Assessment Tools
Quizzes	05%	MCQs
Sessional Examination	10%	MCQs/SAQs/ Assignments
Mid Semester Examinations	25%	MCQs/SAQs
Assignments/Presentations/ Practical	20%	Practical/Viva/ Assignments
Final End Semester Examination	40%	Given below
Total	100%	

COURSE CODE: SBS-623 PAKISTANI SOCIETY AND Cr. Hrs. 3 (3+0)
CULTURE

Course Description

Pakistan has a rich and diverse cultural and historical background, with influences from many regions of the world. This course looks at the evolution and growth of societal norms and cultural patterns along with the multiplicity and diversity of Pakistani society in the light of the theoretical literature on these concepts. Major socio-cultural elements like norms and values, rituals, arts and crafts, beliefs, institutions and knowledge are discussed.

Course Objectives

- To enable the students to explore the structure and function of different social institutions of Pakistan
- To make them able to explore the material and non-material aspects of culture of Pakistan

Course Content

- 1. Society and Culture
 - a) Approaches to the study of society
 - b) The concept of culture: Meaning, key components (language, religion, dress, values etc.)
 - c) Local/anthropological perspective on the history of Pakistani society and culture
 - d) Relationship between society and culture
- 2. Pakistani Society
 - a) Social institutions: Kinship, family, school, religion, media
 - b) Social stratification: forms, features and determinants
 - Caste, biradari, tribe, status/class.
- c) Social mobility: possibilities and challenges
 - 3. Pakistani Culture
 - a) Cultural heritage of Pakistan

- i. Historical places and significance
- ii. Festivals and ceremonies
- iii. Material arts and crafts and performing arts
- iv. Literature and poetry (Heer Waris Shah, Bulle Shah, Abdul Latif Bhatai etc)
- b) Factors promoting national integration
- 4. Contemporary Issues in Pakistani Society
 - a) Gender mainstreaming
 - b) Climate change
 - c) Universal health coverage
 - d) Religious/sectarian militancy
 - e) Corruption
- 5. Cultural change in Pakistan with reference to material and non-material culture and theories about change
 - a. Modernization
 - b. Question of nationalities and ethnicity

Learning Outcomes

After studying this course, students will be able:

• To appreciate the cultural diversity of Pakistan

Teaching Methodologies / Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments,

Learning Resources

- 1. Ahmed, A. (2012). *Millennium and charisma among Pathans (Routledge Revivals): A critical essay in social anthropology*. Routledge.
- 2. Alavi, H. A. (1972). Kinship in west Punjab villages. *Contributions to Indian sociology*,6(1), 1-27.
- 3. Ali, I. (2014). *The Punjab under imperialism*, 1885-1947 (Vol. 923). Princeton University Press.
- 4. Armytage, R. (2015). The Social lives of the elite: Friendship and power in Pakistan. *The Asia Pacific Journal of Anthropology*, *16*(5), 448-463.
- 5. Azam, I. (1980). Pakistan's national culture and character: With special reference to its political culture: Aresearch study prepared for and presented at the National Defense College, Rawalpindi, Pakistan, on 30th October 1977 and 12th Aug. 1978. Amir Publications.
- 6. Barth, F. (1981). Features of person and society in Swat: Collected essays on Pathans. (Vol. 2). Routledge.
- 7. Barth, F. (1959). *Political leadership among Swat Pathans*. New York: Humanities Press

- 8. Benedicte, G. (1993). *The performance of emotion among Paxtun women*.UK: Oxford University Press
- 9. Biddulph, J. (1880). Tribes of the Hindoo Koosh. Bhavana Books & Prints.
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ISLAMIC STUDIES/ETHICS FOR NON-MUSLIMS

A. General Information

1. Course code: AHS-624	Title: Islamic	Credit hours: 2(2+0)
	Studies/Ethics	

2. Description of Course

Islamic Studies is a 2 credit hour course with 2+0 hour lectures per week. This course is appropriate for students with all backgrounds. The core content up to 16-week course is designed to give knowledge of Islamic Studies and it would help in the purification of thoughts and character building of the students. The course will give an opportunity to encourage students to reflect on religious responses to moral issues.

B. Goal

1. Course Objectives

This course outline has been compiled to meet the needs of students studying Islamic Studies as a compulsory subject at undergraduate level. The need for educational reconstruction in Islamic society for strengthening the foundation of faith as well as to enable the rising generation to face the challenges of moderation and globalization with confidence, has been fully recognized and emphasized at NUMS. Every topic of the course deals with practical tasks, community works, case studies and project presentations that will help candidates to identify and explore questions about the meaning of life, creation of all the worlds' creature and to consider such questions in relation to Islamic teachings. Its main objectives are

- To develop the qualities of practical Muslims for understanding and full filling their duties towards Allah and His creation in order to better their life in this world and hereafter.
- To familiarize the students with basic concepts of Islamic ideology along with the pillars of Islam and their importance
- To familiarize with the history of Islam.
- To develop the sense of belongingness to Islam and responsibility through the text of Holy Quran and Hadith.
- To create awareness among new generation about the modern Islamic world and its problems.

2. Learning Outcomes

At the end of this course, students will be able to

- Apply their knowledge for practicing Islam in daily life
- Understand the responsibilities of a Muslim in the light of Holy Quran and Hadith
- Consider themselves accountable to Allah swt on the day of judgement

C. Course Details

Learning Objectives	List of Topics	Weightings	Assessment tool
Ayaat of Holy Quran		10%	SAQs
By understanding selected Ayaat of Noble Quran, student will be able to • Describe the Islamic belief	 General introduction to Islamic Studies as a Subject Translation and interpretation of Selected Text of Holy Quran 		
Become aware of our Creator and consider himself/herself accountable to Allah swt Apply different teachings of Islam in day to day matters	 Verses of Surah Al-Baqra related to Faith (Verse No-284-286) Verses of Surah Al-Hujrat related to Adab-e-Nabi (S.a.w.s) (Verse No-1-5) Verses of Surah Al-Mumenoon related to characteristics of faithful (Verse No-1-11) Verses of Surah al-Furqan related to social ethics (Verses No.63-72) Verses of Surah Al-Hashar related to thinking, day of judgement (Verses No.18,19,20) Verses of Surah Al-Nisa related to marital relationship (Verses No-21,34,35) 		
Ahaadith		05%	SAQs

By understanding selected hadiths, student will be able to • Describe the teaching of Islam how to become a good Muslim and how can we contribute in a Muslim society • Apply different teachings of Islam in day to day through selected hadiths	Translation and interpretation of Selected Text of Hadith (Attached as Annexure)		
Importance of Hadith		05%	SAQs
To teach the students the authentic sayings of the	Brief Concepts of Hadith with kinds and applications Importance of Hadith		
Holy Prophet (S.A.W) to enable them to • Distinguish between the actual traditions of the Holy Prophet (S.A.W) and the fabrications and unauthentic ones • Understand the importance of 2nd major source of Islamic law and its application	Tasks/Community work/Social work	100/	
Seerat-un-Nabi (S.A.W)		10%	MCQs/SAQs

 Explain different events from Holy Prophet Muhammad's (S.A.W) life. Explain the major belief of finality of Holy Prophet Muhammad (S.A.W). Understand the law of blasphemy in islamic sharia and its limits in our lives. 	 Study of Life of Holy Prophet Muhammad (S.A.W). Finality of Holy Prophet (S.A.W) Introduction of Law of blasphemy in Islamic Sharia Tasks/Community work/Social work 		
Islamic Law & Jurisprudence	ce	10%	MCQs/SAQs
 Demonstrate understanding of obligatory jurisprudence matters of daily Muslim's life Understand the basic reasons of difference of opinion between Islamic jurisprudence scholars to avoid the sectarianism in Islam 	 Basic Concepts of Islamic Law & Jurisprudence Sources of Islamic Law & Jurisprudence Islam and Sectarianism Tasks/Community work/Social work 		
Freedom of Expression in Isl	lam	10%	MCQs/SAQs
Describe the limits of usage of emerging electronic /social media world in terms of Islamic teaching	 Limits of freedom of expression in Islam as regarding electronic media (Social media) Tasks/Community work/Social work 		
Islamic Culture & Civilization	on	10%	MCQs/SAQs
Demonstrate the understanding of cultural diversity and acceptance in Islamic society.	 Basic Concepts of Islamic Culture & Civilization Critical comparison between Islamic and Non- Islamic cultures. Tasks/Community work/Social work 		

Impact of Mysticism on Islan	mic Society	20%	MCQs/SAQs
 Analyze the existence of mysticism in Islamic shariah and other religion Elaborate the teaching of Mysticism and its impact on the society. 	 Brief introduction of Mysticism in Islam Critical study of Mysticism according to Quran and Sunnah and its effects Tasks/Community work/Social work 		
Islam & Medical Science		10%	SAQs
 Relate the basic concept of medical science and islam Elaborate the contributions of Muslims in the Development of Medical Science 	 Basic Concepts of Islam & Science Contributions of Muslims in the Development of Medical Science Tasks/Community work/Social work 		
Islamic Economics		10%	SAQs
 Understand the concept of wealth management system and contribution of zakat in the economy of any country. Explain how to do business according to 	 Basic Concepts of Islamic Economic System Contribution of Zakat in the state Economy Islamic Ways of Trade & Commerce 		

the Islamic business	Tasks/Community	
laws.	work/Social work	

Learning Resources

- Hameed ullah Muhammad, "Emergence of Islam", IRI,
- Hameed ullah Muhammad, "Muslim Conduct of State"
- Hameed ullah Muhammad, 'Introduction to Islam
- Prof. Dr. Muhammad Azeem Farooqi, 'Aaeya Hadith Seekhiya'
- Prof. Dr. Muhammad Azeem Farooqi, 'Aaeya Islamic Maeeshat Seekhiya'
- Hussain Hamid Hassan, "An Introduction to the Study of Islamic Law" leafPublication Islamabad, Pakistan.
- Ahmad Hasan, "Principles of Islamic Jurisprudence" Islamic Research Institute, International Islamic University, Islamabad (1993)
- Mir Waliullah, "Muslim Jurisprudence and the Quranic Law of Crimes"
- Prof. Dr. Muhammad Azeem Farooqi, 'Aaeya Tasawuf Seekhiya'
- H.S. Bhatia, "Studies in Islamic Law, Religion and Society" Deep & Deep Publications New Delhi (1989)
- Dr. Muhammad Zia-ul-Haq, "Introduction to Al Sharia Al Islamia"

Assessment

Nature of Examination	Weightage	Marks	Assessment Tools
Quizzes	05%		MCQs/SAQs
Sessional Examination	10%		MCQs/SAQs
Mid Semester Examinations	25%		SAQs
Assignments/Presentations/ Practical	20%		Presentations/ Reflective writing
Final End Semester Examination	40%	40	SAQs 8 40 Marks
(Given below)			
Total	100%	100	

ETHICS

A. General Information

1. Course code: AHS-632	Title: Ethics	Credit hours: 2 (2+0)

2. Description of Course

The subject of 'Ethics' is offered to Non-Muslim undergraduate students in lieu of Islamiyat which is a compulsory subject for all Muslim students. In developing this syllabus, the aims and objectives laid down in the National Education Policy, 2017 has been kept in mind. The proposed topics in the National Curriculum for Ethics are pertinent to the moral dilemmas of everyday life and can be applied to all students studying this subject.

It is extremely significant to introduce the students to the subject of Ethics as it deals with the major aspects of human conduct. It gives the students an insight into the morality of human behavior in terms of right or wrong and good or evil. This syllabus has been developed to address the major aspect of ethical learning using modern teaching methodologies to discuss and comprehend their relevance and application in their lives and in the society as a whole. It directs the attention of students and teachers to examine how ethical values can guide their actions.

Thus, the syllabus of Ethics is progressive and all inclusive. It covers ethical and moral dilemmas with special reference to the cultural diversity of Pakistan.

This syllabus has five major themes:

- 1. Introduction to Ethics
- 2. Historical development of Ethics
- 3. Moral Ethics and Society
- 4. Professional Ethics
- 5. Multiculturalism

Year/Semester in which this course is offered:

This course will be offered in 2nd semester to non-Muslims in lieu of Islamic studies.

B. Goal

Course Objectives

The specific objectives encompassing the progressive, and all-inclusive syllabus of 'Ethics' are as follows:

- To build character of the students so as to enable them to play a vital and positive role in the society.
- To develop a sense of moral reasoning for decision making in life.

- To equip students with social skills and to bring about a change in their thought and behaviour towards fellow human beings.
- To develop students as responsible members of society.
- To understand the importance of religious teachings and their value in social life.
- To discuss the tenets of professionalism e.g. integrity, accountability, humanism and altruism.
- To translate human values into practice, through 'role-models'. (Therefore, various outstanding personalities are included in the syllabus.)
- To promote and practice multi-culturism for global understanding and world peace.

B. Goal

Learning Outcomes

After studying this course, students will be able:

- Become responsible citizens for the development of the country and to provide them opportunities to adjust themselves in the global changes
- Understand how religious and secular cultures and belief systems sustain different ways of life, and can co-exist harmoniously in society

C. Course Details

Themes/Topics	Student L	earning Outcomes	Week	Contact
	Students s	Students should be able to:		Hours
1. Introduction to Ethics				
1.1 Definition and scope	1.1.1. 1.1.2 1.1.3	define ethics; discuss the importance of ethics in a society; illustrate with examples different ways with which ethics manifests in various disciplines; suggest ways in which ethics	1	02 hours
		can be applied in personal, social and public life.		

1.2 Impact of ethics on Society in general.	1.2.1	define society; discuss some ethical values that should be a part of a society.	2	02 hours
1.3 Common Beliefs and Values of different Religions	1.3.1 1.3.2 1.3.3	discuss some of the common basic beliefs of various religions; explore the ways to make people realise that all religions have common moral values; discuss the importance of inter-faith dialogue in today's society.	3	02 hours
1.4 Ethics and Science	1.4.1 1.4.2 1.4.3 1.4.4	elaborate the scientific process (observation, examination, experiment, testing, validation); discuss the relationship between ethics and science; discuss the ethical & unethical approaches in science. discuss the impact of un ethical practices in science/research	4	02 hours
2.Historical development of Eth	ics			
2.1 Development of ethics from ancient, medieval to modern eras	2.1.1	explore the origins and development of various ethical eras; discuss various theories of ethical and moral development.	5	02 hours

2.2 Theories and	2.2.1	evaluate the various theories	6	02
their impact on modern times		and their impact on modern times;		hours
3.Moral Ethics and Society				•
3.1 Moral Philosophy & ethics	3.1.1	Discuss the significance and	7	02
education		role of ethics in a society;		hours
	3.1.2	Identify & explain the elements that can corrupt a society;		
3.2 Justice Bhagwan Das	3.1.3	Explain how different religions and society interact with each other;		
	3.2.1	Discuss whether a society can survive without ethics.		
		Critically analyse the life of the mentioned personality for promotion of justice.		
3.3 Emotion, Habit & Social Life	3.3.1	To discuss the virtuous habits and emotions for our	8	02 hours
Life	3.3.2	moral, social, and political lives;		nours
3.4 Bishop Anthony Lobo	3.4.1	To compare different approaches to the emotions and moral cultivation from the history of philosophy (emotional intelligence).		
		Critically analyse the life of the mentioned personality for promotion of education and social justice.		
MID TERM	1	1	9	
3.5 Social Justice	3.5.3	Define social justice and	10	02
	3.5.2	trace its historical background;		hours

3.6 Abdul Sattar Edhi/Ardeshir Cowasjee (Philanthropist/Businessm an)	3.5.3	Discuss the environment, race, gender, and other causes and manifestations of inequality in society; Discuss the rights and duties of individuals in a society. Critically analyse the life of the mentioned personalities for promotion of social justice.		
4.Professional Ethics				
4.2 Quid e Azam Mohammad Ali Jinnah	4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2.6 4.2.6	define work ethics; exemplify desirable ethical work practices such as honesty, selfrespect and self- discipline, punctuality and respecting the rights of others; demonstrate with examples the importance of time and punctuality in dispensing duties at work places; explain the etiquettes/behaviour patterns at various places of work; elaborate how organizational ethical environment and performance at work place affect overall discuss the personality of our Quaid as an example of personal excellence; discuss the moral values	11	hours
		demonstrated by the illustrious personality.		

4.3 Professionalism	4.3.1	Define professionalism;	12	02
	4.3.2	Discuss the role of professionalism in the field of medicine;		hours
	4.3.4	Consider various tenets of professionalism and their role in medical education.		
	4.3.4	Define reflection;		
		Critically analyze a case study according to the Gibbs model of reflection.		
4.4 Mohtarma Fatima Jinnah	4.4.1	explain how the knowledge about the life and commitment of the mentioned personality can	13	02 hours
	4.4.2	promote professional values;		
		explain how can we learn and adapt in our lives the exemplary behaviour of this personality.		
4.5 Medical Ethics	4.5.1 4.5.2	Define and discuss medical ethics;	14	02 hours
	4.5.3	Discuss the role of medical ethics in the life and career of healthcare professionals;		
		Critically analyze unprofessional behaviour and its implications.		
5.Multiculturalism	'			
5.1 Cultural pluralism	5.1.1	Define cultural pluralism;	15	02
	5.1.2	Discuss way and means to preserve cultures for identity.		hours
5.2 Inter-culturalism.	5.2.15.2.2	Define inter-culturalism;		

	5.2.3	for acceptance of		
5.3 Capt. Cecil Chawdhery		multiculturalism in a society;		
3.3 Capt. Cech Chawdhery	5.2.4	discuss the promotion of		
		dialogue and interaction		
		between cultures.		
		Explore the contribution of		
		this personality as a human		
		rights activist		
REVISION	16			
END TERM EXAMINATION			17-18	

References

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 A problem-solving model casebook. Bethesda, MD: National Association of School Psychologists.

Assessment

Nature of Examination	Weightage	Marks	Assessment Tools
Quizzes	05%	5	MCQs/SAQs
Sessional Examination	10%	10	MCQs/SAQs
Mid Semester Examinations	25%	25	MCQs/SAQs
Assignments/Presentations/ Practical	20%	20	Assignments/presentation/reflective Essays
Final End Semester Examination	40%	40	Given below
Total	100%	100	

Note: The students will maintain a 'Reflective portfolio" writing their reflective essays on various topics as continuous assessment which will be marked by the instructor.

COURSE CODE: SBS-625 INTRODUCTION TO Cr. Hrs. 3
PSYCHOLOGY (3+0)

Course Description

This course will introduce students to the fundamental principles of psychology and to the major subjects of psychological inquiry. The course begins with a short overview of how psychology developed as an academic discipline and an introduction to a number of the principal methodologies most commonly deployed in its study. The subsequent units are arranged around broad areas, including emotion, development, memory, and psychopathology.

Learning Objectives

- To demonstrate understanding of the terminology used in psychology
- To demonstrate understanding of the different theoretical approaches to psychology and be able to articulate the different assumptions behind them
- To apply psychology practically to problems confronting them in society
- To use psychological techniques to explain various aspects of human cognition and behavior
- To demonstrate understanding of the workings of their own consciousness, behavior, and interpersonal relationships.

Course Contents

- 1. Introduction to Psychology
 - a. Psychology: Scientific perspective
 - b. Historical perspective

- c. Schools of psychology
- d. Fields of psychology and their application
- e. Methods of Psychology
- 2. Biological Basis of Behavior

Neuron and its function

- a. Central nervous system
- b. Peripheral nervous system
- c. Endocrine system
- 3. Sensation, Perception, and Consciousness
 - . Senses: Vision, audition, smell, taste and kinesthetic
 - a. Introduction to perception
 - b. Gestalt principles
 - c. Binocular and monocular cues
 - d. Illusions and extra sensory perception
- 4. Learning and Memory
 - . Definition of learning
 - a. Types of learning: Classical and operant conditioning
 - b. Latent and observational learning
 - c. Applications to everyday life
 - d. Definition and types of memory
 - e. Processes and techniques of improving memory
 - f. Forgetting: Nature and causes
- 5. Cognition and Language
 - . Concept of cognition
 - a. Problem solving
 - b. Judgment and decision making
 - c. Language development
 - d. Language and cognition
 - e. Language and culture
 - f. Personality Theories
- 6. Motivation and Emotion
 - a. Introduction to motivation
 - b. Factors affecting motivation
 - c. Introduction to emotions
 - d. Types of emotions
 - e. Physiology and emotion
 - f. Theories of emotion
 - 7. Social Psychology
 - a. Social Thinking and Social Influence
 - b. Social facilitation
 - c. Attribution theory
 - d. Crowd behavior

- e. Conformity, Obedience
- f. Helping behavior

Leaning Outcomes

After studying this course, students will be able:

- To demonstrate an understanding of the general history of the field of psychology
- To explain the nature versus nurture argument and the current status of thinking regarding gene-environment interaction
- To identify the basic components and mechanisms of the major biological systems often studied in psychology
- To demonstrate an understanding of the basic findings within a variety of areas of psychology, including sensation and perception, learning and memory, emotion, development, social psychology, and psychopathology.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources

- 1. Atkinson R. C., & Smith E. E. (2000). *Introduction to psychology* (13th ed.). Harcourt Brace College Publishers.
- 2. Fernald, L. D., & Fernald, P. S. (2005). *Introduction to psychology*. USA: WMC Brown Publishers.
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- 5. Myers, D. G. (1992). *Psychology*. (3rd ed.). New York: Wadsworth Publishers.
- 6. Ormord, J. E. (1995). Educational psychology: Developing learners. Prentice- Hall, Inc.
- 7. Travers, C., Wade, C. P., & Garry, M. (1999). *Invitation to Psychology*. (6th edition). Pearson publications

COURSE CODE: SBS-626 GENDER AND HEALTH Cr. Hrs. 3 (3+0)

Course Description:

There is a differential impact of sex and gender on health as may be seen reflected in the differences in health indicators for men and women. This course will explore gender as a theoretical concept and category of analysis in health, which contributes to the distinguishing experiences of men and women with regards to health. Health is taken to be total wellbeing of humans, including physical, emotional, and psychological wellbeing. This course will utilize the life-cycle framework to study health which will explore all stages of a human life from birth to death, incorporating intersectionality like class, age, ability etc. Along with the biomedical perspective of health including the anatomy and physiology of human bodies, the course will attempt to explore the socio-cultural beliefs and practices towards gender and health that contribute to varying experiences for men and women regarding health. The latter part of the course looks at health in the development sector from a gender lens, exploring the health related programs, policies and indicators.

Learning Objectives:

- To explore the relevance of gender in health and health care
- To understand the gendered knowledge, attitudes and practices towards health
- To explore the socio-cultural aspects related to health-care seeking behavior
- To examine the role of development sector in health projects

Course Contents:

- 1. Theorizing the Relationship between Gender and Health
 - a. Differentiating Sex, Gender Identity and Gender Expression
 - b. Defining "Health" and "Wellbeing"
 - c. Kimberle Crenshaw's "Intersectionality"
- 2. Gender in Health Research
 - a. Androcentric health researches of the past
 - b. Inclusive health research: Facilitators and barriers for vulnerable population
- 3. Life-Cycle Approach
 - a. Birth and Childhood
 - (Sex-selective abortion, Medicalization of Childbirth, Nursing and Midwifery)
 - b. Puberty and Adolescence
 - (Rites of Passage, Life Skills, Menstrual socialization, and hygiene)
 - a. Family Planning and Reproductive Health (Pregnancy, Infertility)
 - b. Elderly and Healthy Aging (Disability)
- 4. Constructions of Masculinity/Femininity and influence on Health
 - a. Body Image, Beauty Ideals
 - b. Heroism, War, Breadwinner
- 5. Gender, Health and Development
 - a. Health Disparities and Gender Mainstreaming
 - b. Role of Development Sector
 - c. Feminism and Health
- 6. Gender and the Health Care System
 - a. Gendered health seeking behavior: Pathway to care
 - b. Access and Control of Health Facilities
 - c. Stigma as barrier to care

- 7. Contemporary issues in Gender and Health
 - a. Gendered technology and cyber harassment
 - b. Fatherhood and shared parenting
 - c. Body rights and child abuse

Learning Outcomes:

After studying this course, students will be able to:

- 1. Understand the significance of gender in health related issues.
- 2. Analyse how socio-cultural practices contribute to distinguishing health related experiences for men and women.

Teaching Methodologies/Instructional Strategies:

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources:

- 1. Baggio, G., Corsini, A., Floreani, A., Giannini, S., & Zagonel, V. (2013). Gender medicine: a task for the third millennium. *Clinical chemistry and laboratory medicine*, *51*(4), 713-727.
- 2. Bird, Chloe E., and Patricia P. Rieker. 2008. Gender and health. Cambridge[u.a.]: Cambridge Univ. Press.
- 3. Bird, C. E., & Rieker, P. P. (1999). Gender matters: an integrated model for understanding men's and women's health. *Social science & medicine*, 48(6), 745-755.
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- 6. Crenshaw, K. W. (2017). On intersectionality: Essential writings. The New Press.
- 7. Curtis, Sara. 2004. Health and Inequality. London: Sage.
- 8. Hammarström, A., Johansson, K., Annandale, E., Ahlgren, C., Aléx, L., Christianson, M., ... & Gustafsson, P. E. (2014). Central gender theoretical concepts in health research: the state of the art. *J Epidemiol Community Health*, 68(2), 185-190.
- 9. Han, S., & Tomori, C. (Eds.). (2021). The Routledge handbook of anthropology and reproduction. London: Routledge.
- 10. Hanson, M. J. (2001). Defining Health and Health-Related Concepts: Conceptual and Theological Considerations. *Word and World*, 21(1), 23-31.
- 11. Howarth, L. A., & Walker, J. J. (2011). The role of family planning in South Asia. BJOG: An International Journal of Obstetrics & Gynaecology, 118, 31-35.
- 12. Huber, M., Knottnerus, J. A., Green, L., van der Horst, H., Jadad, A. R., Kromhout, D., ... & Schnabel, P. (2011). How should we define health? *Bmj*, *343*, d4163.
- 13. Johnson, J. L., & Repta, R. (2012). Sex and gender. *Designing and conducting gender, sex, and health research*, 1737.
- 14. Kariapper, Rehana. 2007. Unravelling realities: reproductive health and rights. Lahore: Shirkat Gah.
- 15. Khan, Ayesha. 2000. Adolescents and reproductive health in Pakistan: a literaturereview: final report. Islamabad, Pakistan: Population Council.
- 16. Kirkham, Marvis. 2006. Social Pollution and Women's Health. New York: Routledge.
- 17. Krieger, N. (2003). Genders, sexes, and health: what are the connections—and why does it matter?.

- *International journal of epidemiology, 32*(4), 652-657.
- 18. Lagro-Janssen, T. (2007). Sex, gender and health: developments in research. European Journal of Women's Studies, 14(1), 9-20.
- 19. Lee, Christina. 1999 Women's Health: Psychological and Social Perspectives. London: Sage. 36
- 20. Markides, Kyriakos S. 1989. Aging and health: perspectives on gender, race, ethnicity, and class. Newbury Park, Calif: Sage Publications.
- 21. Nelson, Debra L., and Ronald J. Burke. 2002. Gender, work stress, and health. Washington, D.C.: American Psychological Assoc.
- 22. Pakistan Journal of Women's Studies, 2006. vol. 13, no. 2 (special issue on women's health).
- 23. Pollard, Tessa M., and Susan Brin Hyatt. 1999. Sex, gender, and health. Cambridge: Cambridge University Press.
- 24. Rajiva, M. (2010). In Papaji's House: Representations of the father/daughter relationship in South Asian diasporic cinema. Feminist Media Studies, 10(2), 213-228.
- 25. Rodríguez-Darias, A. J., & Aguilera-Ávila, L. (2018, January). Gender-based harassment in cyberspace. The case of Pikara magazine. In Women's Studies International Forum (Vol. 66, pp. 63-69). Pergamon.
- 26. Schofield, T. (2002). What does 'gender and health' mean?. Health sociology review, 11(1-2), 29-38.
- 27. Schulz, Amy J., and Leith Mullings. 2006. Gender, race, class, and health: intersectional approaches. San Francisco, CA: Jossey-Bass. Loue, S., & Sajatovic, M. (Eds.). (2004). *Encyclopedia of women's health*. Springer Science & Business Media.
- 28. Shwalb, D. W., Shwalb, B. J., & Lamb, M. E. (Eds.). (2013). Fathers in cultural context. Routledge.
- 29. Svanemyr, J., Baig, Q., & Chandra-Mouli, V. (2015). Scaling up of life skills based education in Pakistan: a case study. Sex Education, 15(3), 249-262.

SEMESTER III

Course Code: AHS- 631 ENGLISH-III Credit hours: 3(3+0)

Course Description

General Information

The central purpose of this course is to extend students' growth in all communication arts by building upon prior knowledge gained throughout the English curriculum.

Learning Objectives

- Develop English speaking and listening skills.
- Write technical English for academic texts.
- Make an effective and correct presentation on the given topics.

Course Content

1- Speaking Skills

Functions of Speaking Modes of persuasion (Pathos, Ethos & Logos) Types of Speech Delivery (Extemporaneous, Impromptu, Memorization, Reading) Pronunciation Skills

2- Listening Skills

Listening Vs Hearing
Fallacies about Listening
Types of Listening
Barriers to Listening
Active Listening

3. Advance Comprehension Skills

Various kinds of Texts and comprehension activities

4. Presentation Skills

Creating PPT Presentation Persuasive strategies Presenting a PPT presentation

5. Critical Writing Skills

Short Review of Movie
Opinionated Writing
(Newspaper Article)
Building Arguments Using Spectrum of Authority

6- Academic Writing

Quoting/ Paraphrasing/ Summarizing Synopsis/ Proposal Writing

Title

Abstract

Keywords

Introduction

Research Objective

Research Questions

Hypothesis

Significance/ benefits of the study

Review of Literature

Research Methodology

Data Analysis

Teaching Methodologies/Instructional Strategies

Interactive lectures/team-based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, written assignments.

Teaching Resources

- ➤ Walther, J. T. (2000). Technical Report Writing Today, by Daniel G. Riordan and Steven E. Pauley. JOURNAL OF TECHNICAL WRITING AND COMMUNICATION, 30(3), 288-289.
- ➤ Baigent, M. (2005). Natural English: Reading & Writing Skills. Intermediate Resource Book. Oxford University Press.
- Alred, G. J., Brusaw, C. T., & Oliu, W. E. (2009). *Handbook of technical writing*. Macmillan.
- Langan, J. (2013). *Exploring writing: Sentences and paragraphs*. McGraw-Hill.

Table of Specifications

Content	Assessment Tool	Marks
Speaking Skills/	SEQs	5+5
Advance Comprehension Skills/ Presentation Skills	SEQs	5+5
Critical Writing Skills	SEQs	5+5
Academic Writing	SEQs	5+5
Total		40 Marks

COURSE CODE: SBS-632 INTRODUCTION TO ECONOMICS

Cr. Hrs. 3 (3+0)

Course Description

This is an introductory subject of economics in which students will be introduced about the fundamentals of economic principles. This course will define the important features of microeconomics as well as macroeconomics from an analytical and theoretical point of views.

Learning Objectives

- Defines economics, and distinguish between microeconomics and macroeconomics.
- Explains how do choice end up determining what, how and for whom goods and services get produced.
- To provide basic concepts of micro economics and macroeconomics to students
- Absorbs the economic way of thinking.

Course Contents

- 1. Microeconomics
 - a) Micro Economics Concepts
 - b) Demand, Supply, and Market Equilibrium
 - c) Elasticity
 - d) Consumer Behavior
 - e) Market Structure and Pricing

2. Macroeconomics

- a) Macro Economics Concepts
- b) Macroeconomic Indicators
- c) Unemployment and Inflation
- d) Aggregate Demand and Aggregate Supply
- e) Fiscal Policy
- f) Monetary Policy

Learning Outcomes

After studying this course, students will be able to:

- Understand the basic concepts, principles, approaches, and theories of economics to tackle the behaviors of economic agents in multiple competitive environments.
- Understand that economic theory is just based on (social, cultural, psychological, etc.) factors and behavior of agents.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team-based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, written assignments.

Learning Resources

- 1. Mankiw, G.N. (2011) Principles of Economics, Latest Edition, ISBN-13: 978-1285165875
- 2. Campbell R. McConnell, Stanley L. Brue, Sean M. Flynn, Economics: Principles, Problems, and Policies, 19th Edition
- 3. Begg, D., & Ward, D. (2012). Economics. (4th Ed.). McGraw-Hill Education
- 4. Kreps, D.M. (2004). Microeconomics for managers. New York: Norton
- 5. Timothy Taylor, Saint Paul, Minnesota (2014) Principles of Microeconomics, Steven A. Greenlaw, Fredericksburg, Virginia Eric Dodge, Hanover, Indiana
- 6. Frank A. Cowell STICERD (2004) Microeconomics Principles and Analysis, Department of Economics London School of Economics.
- 7. Robert S. Pindyck (2012). Microeconomics (8th EDITION) Massachusetts Institute of Technology Daniel L. Rubinfeld University of California, Berkeley
- 8. Richard T. Froyen Page (2013). Macroeconomics: Theories and Policies (10 Edition). Pearson College.

COURSE CODE: SBS-633 INTRODUCTION TO HISTORY Cr. Hrs. 3 (3+0)

Course Description

This is an introductory level course that consists of a review of major concepts relevant to the understanding of history as discipline and as a process. It focuses on the introduction of major concepts, terminologies and issues, understanding of those are essential for the study of history. The course aims at the clarification of basic notions or ideas about what is history and what history is for. It evolves around the idea of the place of history as a source of knowledge and how can we approach historical knowledge with a sense of evolution.

Learning Objectives

- To make students aware of the nature of historical knowledge and research.
- To inculcate among the students a sense of historical evolution of human knowledge, development and progress.
- To develop among the students an ability to understand the common themes of historical knowledge.
- To inculcate among the students of history a sense of critical thinking.

Course Content:

- 1. What is History?
 - a. Literal, terminological and conceptual meaning of history
 - b. History as fact
 - c. History as process, history as narrative

Memory, Record and History

- 2. Nature of History
- . Being and becoming, continuity and change
- a. Evolution, progress and development macrocosm µcosm: Time, space, causation, facts and opinion/ objectivity &subjectivity
- 3. Utility, Benefits & Importance of History
 - . History as a corrective/cohesive force
 - a. History as a repetitive force
 - b. Continuity of history from past to future
 - c. Lessons from past, historical determinism, etc. history as mother of all sciences/knowledge
- 4. Epistemological Nature of History
 - . Relationship of history with other forms of knowledge: Natural Sciences, Social Sciences, Literature and Arts
- 5. Forms and classification of history

Learning Outcomes

After studying this course, students will be able:

- To have an understanding of the major concept of historical knowledge.
- To have an ability to distinguish between 'historical' and 'instinctual' aspects of human knowledge.
- To inculcate among the students a sense of historical evolution of human knowledge, development and progress
- To have an ability to understand the historical evolution.
- To have an ability to plan a role in the future development.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments,

Learning Resources:

- 1. Burke, P. (1977). Varieties of cultural history. Cornell University Press.
- 2. Carlo, G. (1992). Clue, myths, and the historical method. John Hopkins: University Press.

- 3. Carr, E.H. (1961). What is history? Harmondsworth: Penguin.
- 4. Cohn, B. (1988). *An anthropologist among historians and other essay*. Oxford University Press.
- 5. Collingwood, R. G. (1978). The idea of history. Oxford: Oxford University Press.

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- 6. Daniels, C. (1981). Studying history: How and why. New Jersey.
- 7. Fritz, S. (1975). Varieties of history: from voltaire to the present. Vintage.
- 8. Govranski. (1969). History meaning and methods. USA.
- 9. Hegel. (1991). Elements of the philosophy of right. Cambridge: University Press.
- 10. Himmalfarb, G. (1987). The new history and the old. Cambridge: Harvard University Press.
- 11. Kamran, T. (1993). The idea of history through ages. Lahore: Progressive Publisher.
- 12. Lemon, M. C.(2003). Philosophy of history. London: Routledge.
- 13. Marwick, A. (1989). The New nature of history. London.
- 14. Qadir, K. (1994). Tarikh Nigari Nazriyat-o-Irtiga. Lahore: Palgrave.
- 15. Qureshi, A.A.(2004). Study of historiography. Lahore: Pakistan Book Centre.
- 16. Roberts, G.(2001). History and narrative reader. London: Routledge.
- 17. Steedma, C. (2002). Dust: The archive and cultural history. Manchester University Press.
- 18. Shafique, M. (2016). *British historiography of South Asia: Aspects of early Imperial patterns and perceptions*. Islamabad: NIHCR, Quaid-i-Azam University.

Course Code : SBS - 634	INTRODUCTION TO PHILOSOPHY	Cr. Hrs. 3 (3+0)
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Course Description:

This course will acquaint students to basic philosophical concepts, basic problems and methods of philosophical inquiry, concentrating on the work of major thinkers as Plato, Aristotle, Augustine, Aquinas, Descartes, Hume, Kant, Hegel, Marx, Kierkegaard, Sartre, Noam Chomsky etc. Topics of discussion include the nature of philosophy; the nature and limits of human knowledge; the scope and limits of human freedom; the differences between right and wrong conduct; the nature of the good life; and the meaning and value of human existence.

Learning Objectives:

- To identify the major periods and the major figures in the history of Western philosophy
- To identify and analyze the basic problems of philosophy in the fields of metaphysics, epistemology and axiology.
- To interpret, summarize, and paraphrase the views of philosophers as expressed in philosophical texts.
- To use the logical and critical thinking methods of philosophy to analyze and evaluate the ways in which philosophers attempt to solve the problems of philosophy.
- To locate, evaluate, and effectively use information from a variety of relevant sources.
- To participate actively in discussions of philosophical ideas and issues.

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Course Contents:

1. Module 1: Philosophy as word:

Thinking, reasoning, remembering, or involving conscious intellectual activity.

The formative role it plays in the development of cognitive processes.

2. Module 2: Philosophy as knowledge (Epistemology):

Study of knowledge, belief, and rationality. What is knowledge? How do we acquire knowledge? What is it to believe something? Can I choose what to believe? How does our commonsense notion of belief common in cognitive science and the decision sciences?

3. Module 3: Ancient and Medieval Philosophies:

A study of major philosophers of ancient Greece, Rome, and the medieval period, including the Pre-Socratics, Plato, Aristotle, Epicurus, the Stoics, Augustine, Anselm, and Aquinas.

4. Module 4: Modern and 20th century Philosophies:

A study of Mind-Body Distinction, the Empiricists, Rationalists, Existentialists, and Pragmatists and issues regarding skepticism, justification, freedom of the will, personhood and personal identity, particularly narrative accounts of the self.

5. Module 5: Philosophy of Language:

What is language and what is it for? What is a meaningful sentence? What makes a sentence true? Why is language always changing? The relationship between language and culture (language games; radical interpretation; social change).

6. Module 6: Philosophy of Science:

Does science lead to objective knowledge? How do we distinguish between creation from evolution, or astrology from astronomy? It includes science vs. pseudoscience, scientific revolutions, the philosophy of space and time, and realism vs. relativism.

7. Module 7: Ethics, Aesthetics and Art (Axiology):

The nature of value, duty, right and wrong, the good life, human rights, social justice, liberty and its limitations, civil disobedience, capital punishment, terrorism, animal rights and environmental ethics. What is art? What is beauty, and sublime? What makes an object a work of art?

8. Module 8: Logic and Argumentation:

What is an argument? Distinguishing between good and bad arguments; identifying common fallacies; the difference between deductive and inductive reasoning; the nature of scientific, moral, and legal reasoning.

Learning Outcome:

After studying this course, students will be able:

- To locate, evaluate, and use effectively information from a variety of relevant sources and to reflect and critically think using logic.
- Understand key philosophical terms pertinent to the study as an academic discipline and learn how to argue and think philosophically.

• Consider how philosophical concepts have relevance to their respective fields study, personal lives, and on present-day ethical issues.

Teaching Methodologies/Instructional Strategies:

Interactive lectures/ team-based learning, flipped classroom, critical discussions group projects/presentations, role-plays, seminars, design thinking (case-method), ⁸² Il club, tutorials, ethnographic films, tutorials, written assignments.

Learning Resources:

- 1. Buckingham, Will. (2011). *The Philosophy Book*. DK Publishing.
- 2. Hakim, A. B. (2016). Historical Introduction to Philosophy. Routledge.
- 3. Audi, Robert. (2011). Epistemology. Routledge
- 4. Rosenberg, A. (2018). Philosophy of Social Science. Routledge.
- 5. Copi, Irving M. (2019). Introduction to Logic. Routledge
- 6. Lillie, William. (2020). Introduction to Ethics. Routledge
- 7. Pirsig, Robert M. (2014). Zen and the Art of Motorcycle Maintenance. Vintage

Course Code: INTRODUCTION TO Cr. Hrs. 3 (3+0)
SOCIOLOGY

SBS-635

Course Description:

The course is designed to introduce the students with sociological concepts and the discipline. The focus of the course shall be on significant concepts like social systems and structures, socio-economic changes and social processes. The course will provide due foundation for further studies in the field of sociology.

Learning Outcomes:

- 1. To provide students with up-to-date knowledge and recent development in production of scientific knowledge in the field of sociology.
- 2. To be able to apply sociological perspectives to understand and analyze a social problem.

Contents

- 1. Introduction
 - a) Definition, Scope, and Subject Matter
 - b) Sociology as a Science
 - c) Historical back ground of Sociology

- d) Sociology and other Social Sciences
- e) Methods of Sociological Research

2. The Sociological Perspectives

- a) Functional Analysis
- b) Symbolic Interactionism
- c) Conflict Theory

3. Culture

- a) Definition, Types of Culture
- b) Components of Culture
- c) Cultural Relativism
- d) Ethnocentrism
- e) Ideal VS Real Culture
- f) Cultural Contact
- g) Cultural Lag

4. Socialization

- a) What is Human Nature?
- b) The Social Development of the Self
- c) Agents of Socialization

5. Social Structure and Social Interaction

- a) Social Class
- b) Social Status
- c) Process of Social Interaction

6. Social Groups

- a) Group, Community, Society
- b) Types of Social Groups
- c) Group Dynamics
- d) Leadership

7. Deviance and Social Control

- a) Deviance and its Types
- b) Social Control and its Need
- c) Forms of Social Control
- d) Methods & Agencies of Social Control

8. Social Inequality

- a) Social Stratification
- b) Inequalities of Gender

- c) Inequalities of Race and Ethnicity
- 9. Social Institutions
 - a) The Family
 - b) Education
 - c) Religion
 - d) The Economy
 - e) Politics
 - f) Medicine: Health and Illness
 - g) Emerging Social Institutions
- 10. Collective Behavior and Social Movements
 - a) Forms of Collective Behavior
 - b) Types and Tactics of Social Movements
 - c) The Life Course of Social Movements
- 11. Technology, Social Change, and the Environment

Teaching Methodologies/Instructional Strategies

Lectures and Class Discussions, Assignments, Group Activity, Presentations, Seminars

Learning Resources:

- 1. Albrow, M. (2003). Sociology, London: Routledge.
- 2. Anderson, M. & Howard, F. T. (2001). Sociology the Essentials. Australia: Wadsworth.
- 3. Barnard, A. (2004). *Sociology*, Cambridge University Press.
- 4. Gidden, A. (2002). *Introduction to Sociology*. UK: Polity Press.
- 5. Henslin, J. M. (2014). Sociology: A Down-to-Earth Approach: Boston. Pearson.
- 6. Horton, P. B., & Hunt, C. L. (1976). Sociology. Tokyo: McGraw-Hill, Inc.
- 7. Koening, S. (1957). *Sociology: An Introduction to the Science of Society*. New York: Barnes and Nobel.
- 8. Leslie, G. et al. (1973). Order and Change: Introductory Sociology Toronto: Oxford University Press.

SEMESTER IV

COURSE CODE: SBS-641 PHILOSOPHY OF HEALTH Cr. Hrs. 3 (3+0)

Course Description:

This course addresses ontological (nature of reality), epistemological (where does knowledge come from) and ethical (what is right or wrong) questions that is the need of every modern health institution. Therefore, this course attempts to move beyond the bio-medical framework and understand the institution of health by asking larger philosophical questions like what is health?

who is a healer? what are goals of medicine/health care? what are necessary parameters for deciding treatment? and who deserves health care? etc. The course will unpack underlying concepts related to ethics, processes and people which constitute the maintenance of health for human beings. It also aims to understand the strengths and weakness of dominant models of health and looks at possibility of alternative conceptual frames.

Learning Objective:

- To have a basic orientation of philosophical concepts and reasoning
- To explore diverse perspectives on the concept of health and illness
- To explore the distinguishing features of bio-medical institutions and alternative models of health
- To explore historical and current ethical positions on health issues and understand healthcare decision making

Course Content:

- 1. Introduction to General Philosophy
 - a. Ontology, epistemology and ethics
 - b. Reasoning approaches and logical fallacies
- 2. Ontology of Health
 - . Concept of health and illness
 - a. Contested and controversial disease categories
 - b. Global health VS indigenous health
 - c. Fundamental human right
 - d. Debate on universal and private health care
- 3. Epistemology of Health: Theories, Causes and Explanation
 - . Science Vs Indigenous knowledge
 - a. Types of knowledge: 'Evidence' based medicine and behavioral researches
 - b. Biomedicine and 'alternative' models of health
 - c. Reductionism and holism in health
- 4. Ethical Issues in Health
- . Moral and ethical relativism

Patient as body or person

- a. Clinical judgment and the role of 'expertise'
- b. Values in health research: Informed consent
- c. Moral Status of the Fetus
- d. End of life decisions: defining death, organ donations
- e. Quality assurance and clinical trials: Measuring health outcomes
- f. Distributive justice: Healthcare access and disparities

Learning Outcomes:

After studying this course, students will be able:

• To develop a foundation for philosophical perspectives (ontological, epistemological and

- ethical) that presumably underlie and influence daily health decision making
- To develop a reasoned, critical and reflexive approach to institution of health
- To develop the ability to construct philosophical arguments and critically read philosophy essays

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments, reading summaries, written assignments/reflection papers

Learning Resources

- 1. Andersen, H. (2012). Mechanisms: What are they evidence for in evidence-based medicine? *Journal of Evaluation in Clinical Practice*, 18(5), 992-999.
- 2. Amundson, R. (2000). Against normal function. Studies in history and philosophy of science part C. Studies in history and philosophy of biological and biomedical sciences, 31(1), 33-53.
- 3. Ankeny, R. A. (2011). Detecting Themes and Variations: The Use of Cases in Developmental Biology. *Philosophy of Science*, 79(5), 644-654.
- 4. Ankeny, R. A. (2014). The Overlooked role of cases in casual attribution in medicine. *Philosophy of Science*, 81(5), 999-1011.
- 5. Aronowitz, R. A. (1998). *Making sense of illness: Science, society and disease*. Cambridge University Press.
- 6. Baylis, F., Downie, J, Hoffmaster, B., & Sherwin, S. (2004). *Health care ethics in Canada* (2nd ed.). Nelson.
- 7. Biddle, J. (2007). Lessons from the Vioxx debacle: What the privatization of science can teach us about social epistemology. *Social Epistemology*, *21*(1), 21-39.
- 8. Bishop, M. A., & Trout, J. D. (2005). *Epistemology and the psychology of human judgment*. Oxford University Press on Demand
- 9. Campaner, R. (2012). *Philosophy of medicine: Causality, evidence and explanation*. Archetipo libri.
- 10. Caplan, A. L. (1992). Does the philosophy of medicine exist? *Theoretical Medicine*, *13*(1), 67-77.
- 11. Carel, H. (2007). Can I be ill and happy? *Philosophia*, 35(2), 95-110.
- 12. Cartwright, N. (2007). Are RCTs the gold standard? *Bio-Societies*, 2(1), 11-20.
- 13. Cartwright, N. (2011). A Philosopher's view of the long road from RCTs to effectiveness. *The Lancet*, *377*(9775), 1400-1401.
- 14. Demazeux, S., &Singy, P. (2015). *The DSM-5 in perspective*. Springer Science Business Media.
- 15. Dodds, S. (2008). Inclusion and exclusion in women's access to health and medicine. *IJFAB: International Journal of Feminist Approaches to Bioethics*, 1(2), 58-79
- 16. Epstein, S. (2008). Inclusion: The politics of difference in medical research. University of

- Chicago Press.
- 17. Ereshefsky, M. (2009). Defining 'health' and 'disease'. Studies in history and philosophy of science part C: Studies in history and philosophy of biological and biomedical sciences, 40(3), 221-227.
- 18. Fisher, J. (2009). Biomedical ethics: A Canadian focus. Oxford University Press.
- 19. Glannon, W. (2005). Biomedical ethics. Oxford University Press.
- 20. Hofmann, B. (2002). On the triad disease, illness and sickness. *The Journal of Medicine and Philosophy*, 27(6), 651-673.
- 21. Howick, J. (2011). Exposing the vanities and a qualified defense of mechanistic reasoning in health care decision making. *Philosophy of Science*, 78(5), 926-940
- 22. Huneman, P., Lambert, G., & Silberstein, M. (2014). Classification, disease and evidence. *History, Philosophy and Theory of the Life Sciences*, 7.
- 23. Kingma, E. (2007). What is it to be healthy? *Analysis*, 67(294), 128-133.
- 24. Kingma, E. (2009). Paracetamol, poison, and polio: Why Boorse's account of function fails to distinguish health and disease. *The British Journal for the Philosophy of Science*, 61(2), 241-264.
- 25. Kluge, E. W. (2005). Readings in biomedical ethics: A Canadian focus. (3rd ed.). Pearson.
- 26. Marquis, D. (1989). Why abortion is immoral. The Journal of Philosophy, 86(4), 183-202.
- 27. Mezzich, J. E. (2002). *Culture and psychiatric diagnosis: A DSM-IV perspective*. American Psychiatric Pub.
- 28. Munson, R. (2008). *Intervention and reflection: Basic issues in medical ethics.* (8th ed.). Wadsworth Publishing.
- 29. Pence, G. E. (2008). Classic cases in medical ethics. (5th ed.). McGraw-Hill.
- 30. Schwartz, P. H. (2007). Defining dysfunction: Natural selection, design, and drawing a line. *Philosophy of Science*, *74*(3), 364-385.
- 31. Shetty, P. (2010). Medical tourism booms in India, but at what cost? *The Lancet*, *376*(9742), 671-672.
- 32. Timmermans, S., & Berg, M. (2010). *The gold standard: The challenge of evidence-based medicine and standardization in health care*. Temple University Press

33. Worrall, J., & Worrall, J. (2001). Defining disease: Much ado about nothing? In *life* interpretation and the sense of illness within the human condition. Springer: Dordrecht.

COURSE CODE: SBS-642 POLITICAL SCIENCE AND Cr. Hrs. 3
GOVERNANCE (3+0)

Course Description

This course introduces the students with the fundamental concepts, ideas, and definition of political science. It also wraps the areas of political theories, comparative politics and international relations. It offers basic concepts, ideas, and discussion about the nature and function of the state and society, government and politics. This course will look at how different conflicting interests, quest for power, social justice, human rights, and legitimacy have an effect on the political process.

Learning Objectives

- To understand the social, political and economic forces that have an effect on the political process.
- To have a conceptual understanding of ideological basis that figures their own political thinking as well as that of others
- To provide with knowledge and investigative instrument for better community engagement
- To understand the interaction between ideologies, institutions and personalities that
- outline politics in the modern world

Course Content

- 1. Definition, Nature, Scope and Sub-fields of Political Science
- 2. Approaches to the Study of Political Science: Traditional and Behavioral Approach
- 3. What is Politics?
 - Power and authority
- 4. State and Functions of the State
- 5. Concept of Sovereignty
- 6. Nations and Nationalism
- 7. Political Culture and Socialization
- 8. Understanding Ideology
- Liberalism, conservatism, socialism, fascism, feminism, communism
 - 9. Forms of Government
- Democracy, authoritarian parliamentary, presidential
 - 10. Constitution: Definition, Sources, Kinds and Amendments
 - 11. Morality, Individual Liberty and Rights & Duties
 - 12. Organs of Government
- . Legislature, executive, judiciary
 - 13. Assemblies and Political Executives, Levels of government

14. Globalization and Politics, International Politics, approaching to Understanding World Politics

Learning Outcomes

After studying this course, students will be able:

• To understand the basic concepts of political sciences.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources:

- 1. Agarwal, R. C. (2006). *Political theory* (Principles of Pol. Science). New Delhi, S. Chand & Co.
- 2. Andrew, H. (2004). *Political ideologies: An introduction*. (3rd ed.). New York: Palgrave Macmillan.
- 3. Choudhry, A. S. (1996). *Urdu*. Lahore Standard Book Depot.
- 4. Colomer, J. M. (1996). *Political institutions in Europe*. London
- 5. Dryzek, J. S., Honig, B., & Phillips, A. (2006). *Identity, difference, toleration. The Oxford Handbook of Political Theory*. Oxford University Press.
- 6. Haq, M. (1996). Theory and practice in political science. Lahore Book land
- 7. Harold, J. L. (1960). Parliamentary government in England. London, Allen & Unwin.
- 8. Ian, M. (2005). *Political concepts: A reader and guide*. Edinburgh University Press.
- 9. John, H. H. (1997). Major foreign powers. New York: Harcourt, Brace & World, Inc.
- 10. Joseph, N. (2000). *Interdependence, globalization, and the information age in understanding international conflict: An introduction to theory and history.* (7thed.). Longman.
- 11. Larry, D. (1996). *Toward democratic consolidation in larry diamond and marc*. JHU Press: Baltimore.
- 12. Mahajan, V. D. (2006). *Political theory- Principles of Pol. Science*. New Delhi, S. Chand & Co.
- 13. Maya, L., &Robert, E. (2003). *Political ideologies*. (3rd ed.). London: New York: Routledge.
- 14. Mazher, H. (1996). Theory and practice in political science. Lahore Bookland.
- 15. Michael, G. R. (1997). Political science: An introduction. London: Prentice Hall.
- 16. Mohammad, S. (1996). Introduction to political science. Lahore: Ilmi Kutub Khana.
- 17. Pomper, M. B. (1993). American government. London: McMillan Publishing Co.
- 18. Ramsay, M. (1940). How Britain is governed. London: Constable & Co.
- 19. Robert, G. N. (1968). European government. New York: McGraw-Hill, Inc.
- 20. Robert, J. & Dorreen, J. (1997). A Comparative introduction to political science. New Jersey.
- 21. Wilson, J. Q., <u>DiIulio, J. J.</u>, & Bose, M. (2011). *American government: Institutions and politics*. (12th ed.). Engage Learning.

COURSE CODE: SBS-643 LAW AND HUMAN RIGHTS Cr. Hrs. 3 (3+0)

Course Description:

This will be an introductory course for students about the nature and sources of both Western and Islamic law. It will cover definitions, functions and purposes of law, territorial nature of law, legal concepts of rights, property, and persons. The course is designed to also impart knowledge about meaning, scope and importance of human rights. The origin of human rights as a product of natural law derived from different philosophical and religious basis and its development. The focus of the course would be on International Bill of Human Rights, the enforcement mechanism both under the UN Charter based bodies, the treaty-based system and national human rights law as contained in the Constitution and other statutes along with its enforcement mechanisms.

Learning Objectives

- To introduce students to the history and development of human rights in the context of law
- To give an overview of the diverse aspects of human rights like cultural, social, economic and political etc.
- To examine major human rights issues in a cross-culture perspective

Course Content

- 1. International Law and Theoretical Foundation of Human Rights
- 2. History and Development of Basic Human Rights
- 3. Mechanisms of UN Charter
- 4. Cultural Relativity VS Universality Debate
- 5. Peacekeeping and Human Rights
- 6. Economic, Social and Cultural Rights
 - a. Civil and political rights
- 7. Contemporary Issues in Laws in Pakistan: Gender, Disability, Freedom etc.

Learning Outcomes

After studying this course, students will be able:

- To achieve an understanding of the major sources and concepts of western and Islamic laws.
- To be able to distinguish between 'rights' and 'human rights'
- To gain an understanding of major human rights issues in a cross-cultural perspective
- To be able to understand International Bill of Human Rights & the enforcement mechanism both under the UN Charter based bodies and the treaty-based system.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources:

- 1. Bhansali, S.R. (2008). Basu's human rights in constitutional law. New Delhi: LexisNexis.
- 2. Brownlie, I., & Guys, G. (2010). Brownlie's documents on human rights. Oxford: OUP.
- 3. Denning, L. (1979). The discipline of law. London: Butterworth.
- 4. Dworkin, R. (1977). Taking rights seriously. London: Duckworth.
- 5. Eide, A. (2001). Economic, social and cultural rights: A universal challenge *economic*, social and cultural rights, a textbook.
- 6. Fuller, L. (2009). The morality of law. Delhi: Universal.
- 7. Fenwick, H. (1994). *Civil liberties*. London: Cavendish.
- 8. Gunn, T. J. (2003). The complexity of religion and the definition of religion in international law. *Harv. Hum. Rts. J.*, *16*, 189.
- 9. Gunning, I. R. (1991). Arrogant perception, world-travelling and multicultural feminism: The case of female genital surgeries. *Colum. Hum. Rts. L. Rev.*, *23*, 189.
- 10. Harris, P. (2007). An introduction to law. Cambridge University Press.
- 11. Judgments on human rights and public interest litigation by Supreme Court of Pakistan. (1999). Lahore: PLD.
- 12. Marks, S., &Clapham, A. (2005). International human rights lexicon. OUP Oxford.
- 13. Moeckli, D. (2017). Equality and non-discrimination. In *equality and non-discrimination* under international law.Rutledge.
- 14. Smith, R. K.M. (2010). Texts and materials on international human rights. Oxon: Routledge.
- 15. Steiner, H. J., Alston, P., & Goodman, R. (2008). *International human rights in context: Law, politics, morals: Text and materials.* USA: Oxford University Press.

COURSE CODE: SBS-644 HEALTH ECONOMICS Cr. Hrs. 3 (3+0)

Course Description

In this course, students will learn how to apply economic methods to investigate the functioning of different aspects of healthcare system and implication of multiple policies planned for improving healthcare system. Students will learn about the economic techniques relevant to the health and how to apply these techniques in improving individual's health and country's healthcare system.

Learning Objectives

- To guide students about basic concepts of health economics.
- Introduce relevant theory of microeconomics and demonstrate its applicability to health care issues
- How scarce resources are allocated among alternative uses for the care of sickness.

- To promote, maintain and improved the health and health care services.
- Outline key principles of health economics including efficiency and equity
- Provides a foundation for and rationale for performing economic evaluation
- To understand the healthcare issues of Pakistan

Course Contents

- 1. What is Health Economics
 - What is health economics?
 - Why health economics is important
 - Pakistan healthcare system issues
 - System in need of Reform
- 2. The Demand for Health
 - Health as a form of human capital
 - Additional Factors that affect the investment in health
 - Understanding the Investment Aspects of the Grossman Model
- 3. The Demand for Health Care
 - The Demand for Health Care
 - Asymmetry of Information and Imperfect Agency Aggregate
 - Demand for Health Care
 - Health Care: A Normal, Superior, or Inferior Good?
- 4. The Market for Health Insurance
 - The Insurance Market
 - Employer-Based Insurance
 - Optimal Insurance Contracts
 - Reimbursement
 - Integration Between Third Party Payers and Healthcare Providers
 - Options for Healthcare Financing
 - Health Insurance and the Consumption of Health Care
- 5. Healthcare Production, Costs, and Supply
 - The Nature of Production
 - Short Run Costs for a Medical Firm
 - Long Run Costs

- The Nature of Supply
- 6. The Healthcare Workforce Market
 - The Market for Physicians and Nurses
 - The Physician's Market
 - Physician Shortage?
 - The Result of Changing Incentives
 - Projections about the Supply and Demand of Physicians: Economic and Health Planning Viewpoints
- 7. Technology Transfer in Health Care
 - Technology in Health Care
 - Technological Change
 - Technological Diffusion
 - Measuring the Contribution of Technological Change
- 8. Market Failures and the Role of Government
 - Pareto Efficiency
 - Externalities
 - Public Goods
 - Information Imperfections
 - The Monopoly Model
 - Monopolistic Competition
 - Oligopoly
 - The Role of Government
- 9. Issues in Health Economics
 - Socioeconomic Factors
 - The Hospital Industry
 - 10. Public Policy and Health Economics
 - The Market-Based System
 - Recommendations for Improving the Efficiency of the Pakistan Healthcare System

Learning Outcomes

After studying this course, students will be able:

• To interpret and appropriately apply the key concepts of economics within the context of the health

- system
- To debate the relative merits of equity considerations in setting priorities for a health system
- To understand approaches to identify and value costs and outcomes in economic evaluation
- To describe major types of economic evaluations and to understand their use in the decision-making process
- To write concise reports on health economic issues demonstrating sound knowledge and skills to apply analytical thinking for a scientific debate and/or problem solving

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, tutorials, written assignments

Learning Resources

- 1. Diane M. and Dewar (2017) Essentials of health economics, Jones & Bartlett Learning.
- 2. Folland, S., Goodman, A. C., & Stano, M. (2013). The economics of health &health care (7th Ed.). Pearson.
- 3. Kernick, D. (2002). Getting health economics into practice. Radcliffe Medical Press
- 4. Mcpake, B., Kumaranayake, L., & Kumaranayake, C. N. (2003). Health economics. Routledge London & N.Y.
- 5. Barbara McPake, Charles Normand, Samantha Smith, Anne Nolan Health Economics: An International Perspective (4th Edition).
- 6. Jay Bhattacharya, Timothy Hyde, et al. (2013) Health Economics.
- 7. Lanis Hicks Economics of Health and Medical Care (7th Edition)
- 8. Lanis Hicks (2020) Economics of Health and Medical Care 7th Edition, Jones & Bartlett Learning.
- 9. Frank A. Sloan, Chee-Ruey Hsieh, Health Economics, second edition (The MIT Press) second edition. The MIT Press; second edition

COURSE CODE: SBS-645

ANTHROPOLOGY, HEALING AND RELIGION

Cr. Hrs. 3 (3+0)

Course Description:

This course examines the relationships between religion and healing in a variety of social, cultural and religious contexts and geographic locales. The course facilitates critical reflection on how social and cultural theories have been employed by anthropologists, religious studies scholars, and others to interpret diverse healing practices. Other topics addressed in the course include the construction of religious meaning through illness narratives, gender and religious healing, and the relationships among healing, affliction, and structures of social power and domination. This course explores biomedicine as one among many ways of thinking through and constituting personhood, illness and the body. It deals with the challenges that arise when biomedical expertise meets other understandings of illness and suffering; the multiple kinds of care provided in institutional, public, religious and domestic settings; the relationship between curing and healing; and the ways in which people grapple with affliction and uncertainty through narrative, through relationships, and through action.

Learning Objectives

- To define religion and belief systems within the concept of culture.
- To discuss the role of myth & ritual in cultures.
- To introduce key theories and current debates at the interface of anthropology and medicine through a focus on cross-cultural approaches to illness, pain, healing, the body and care.
- To distinguish between the concepts of manna, animism, and animatisms.
- To explore the centrality of health and healing to social, political, and historical processes in general.
- To explore biomedicine as one among many ways of thinking through and constituting personhood, illness and the body.
- To discuss psychic phenomena within the context of science and religion.

Course Content

- 1. Intellectualist: Foundational Concepts of Religion
- 2. Durkheim: Origin of Religion
- 3. Tylor: Animism
- 4. Symbolic Anthropology
 - Geertz: Religion as a Cultural System
- 5. Douglas: Concepts of Pollution and Taboo
- 6. Sorcery, Witchcraft, Magic and Evil Eye
- 7. Spiritual and Faith Healing
 - a) Prayer and Meditation
 - b) Textures of Religious Texts and Healing
 - c) Role of Shrine
 - d) Faith Healers and Politics of Modernity and Post-Modernity
- 8. The Body and its Parts

- a) Embodiment as a Paradigm for Anthropology
- b) Cultivating the Body: Anthropology and Epistemologies of Bodily Practice and Knowledge.
- 9. Healers
 - a) Healing Rituals: A Critical-Performative Approach
 - b) Meaning, Medicine and the Placebo effect
- 10. Psychological: Influence of Religion on People
 - a) Kleinman model of somatization
 - b) Concept of normality and abnormality
- 11. Death and Dying

Learning Outcomes

On completion of this course, the student will be able to:

- 1. Be able to demonstrate knowledge of the ways in which social understandings of the human body are formed and transformed by healing knowledge and practices.
- 2. A clear understanding of how "traditional healers" form their practices in a field of multiple healer-patient relations and why "modernity" has not made non- biomedical forms of healing disappear.
- 3. Be able to analyze and debate how broader political, economic, and historical frames are immediately relevant for an understanding of the body, illness, and healing.
- 4. A thorough understanding of the implications of the objectification of the body by medical knowledge.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources

- 1. Adrian, M. (2009). France, the veil and religious freedom. *Journal of Religion, State and Society*37(4)345-374.doi.org/10.1080/09637490903315385
- 2. Asad, T. (1993). *The construction of religion as an anthropological category*. John Hopkins Press
- 3. Boddy, J. (1988). Spirits and selves in northern Sudan: The cultural therapeutics of possession and trance. *American Ethnologist*, *15*(1), 4-27.http://dx.doi.org/10.1525/ae.1988.15.1.02a00020
- 4. Bowie, F. (2008). Anthropology of religion. *Religion Compass*. 2(5).
- 5. Csordas, T. J. (1988). Elements of charismatic persuasion and healing. *Medical Anthropology Quarterly*. 2(2).

- 6. Douglas, M. (1996). *Natural symbols: Explorations in cosmology*. Routledge: London and New York
- 7. Foster, G. M. (1976). Disease etiologies in non-western medical systems. *American Anthropologist*, 78(4), 773-782.
- 8. Geertz, C. (1973). *Religion as a cultural system*. Fontana Press
- 9. Gunn, T, J. (2004). Under God but not the scarf: The founding myths of religious freedom in the United States and Laicite in France. *Journal of Church and State*, 46(1)7-24.
- 10. Ortner, S. B. (1973). On key symbols. *American Anthropologist New Series*, 75(5)1338-1346.
- 11. Thomas, F. (2007). Our families are killing us: HIV/AIDS, witchcraft and social tensions in Namibia. *Anthropology of Medicine*, 14(3279-91).
- 12. Wolf, E. R. (1958). The virgin of Guadal*upe:* A Mexican national symbol. *The Journal of American Folklore*, 71(279)34-39.
- 13. Fadiman, Anne. 1998. The Spirit Catches You and You Fall Down: A Hmong Child, Her American Doctors, and the Collision of Two Cultures. New York: Noonday Press.
- 14. Taylor, J. S. 2003. 'The Story Catches You and You Fall Down: Tragedy, Ethnography, and "Cultural Competence", Medical Anthropology Quarterly 17(2): 159-181
- 15. Hahn, R. 1995. Sickness and Healing: An Anthropological Perspective. New Haven: Yale University Press.
- 16. Helman, C.G. (Ed.). 2000. Culture, Health and Illness: An Introduction for Health Professionals. Oxford: Hodder Arnold. (pp. 1-11)
- 17. Nichter, M. & Lock, M. (Eds.). 2002. New Horizons in Medical Anthropology: Essays in Honour of Charles Leslie. London: Routledge.
- 18. Hahn, R. A. and Inhorn, M. C. 2009. 'Introduction.' In Anthropology and Public Health: Bridging Differences in Culture and Society Oxford: Oxford University Press [available online through the library]
- 19. Napolitano, D. and Jones, C. 2006. Who needs 'pukka' anthropologists'? A study of the perceptions of the use of anthropology in tropical public health research. Tropical Medicine and International Health 11(8): 1264-1275.
- 20. Kleinman, K. and Kleinman, J. 2007. 'Somatization: The Interconnections in Chinese Society among Culture, Depressive Experiences, and the Meanings of Pain' in M. Lock and J. Farquhar (eds), Beyond the Body Proper: Reading the Anthropology of Material Life. Durham; London: Duke University Press
- 21. Hemmings, C. 2005. Rethinking medical anthropology: How anthropology is failing medicine. Anthropology and Medicine 12(2): 91-10

SEMESTER V

Course Code: SBS-651	RESEARCH	Credit hours: 3 (3+0)
	METHODOLOGY	

Course Description

Knowledge and research are two components of every academic discipline. Knowledge is static and research is its dynamic counterpart. Advancement of knowledge depends upon research and advanced knowledge helps higher level research. So to improve knowledge, to make new discoveries in a discipline or to reinterpret the existing knowledge in a different way you need to conduct research. And to conduct a systematic, reliable, valid and scientific research it is important to know the basic norms of research. This course is designed to train students in these basic norms of research.

Course Objective

This course is designed to achieve the following objectives:

- i. Acquaint students of BS Social Science of Health with the basic concepts in research;
- ii. Train students in different steps of social scientific research, like selection of topic, preparation of research proposal, literature review, hypothesis construction, sampling, data collection and analysis, and presentation.
- iii. Prepare students to handle high level research.

Course Outcome

After completing this course, students are expected to:

- i. Understand the basic concepts in social science research in general and in government and public policy in particular.
- ii. Understand the basic characteristics and methods of different types of research;
- iii. Become proficient in every step of academic research from selecting a topic to the final presentation of research.
- iv. Handle research independently while using scientific methods.

Course Outline

- 1. Social Science Research: basic criteria of scientific research: Objectivity, Reliability, Validity, etc.
 - 2. Research Paradigms and their philosophical underpinnings.
- 3. Some basic concepts in research process:

Concept, theory, variables, conceptualization and operationalization of research, time dimension in research

4. Types of research and research designs

Deductive and Inductive logics in social science research. Characteristics of qualitative and quantitative research.

Types of quantitative research

- Types of qualitative research
- 5. **Hypothesis**: sources and types of hypothesis and characteristics of a good hypothesis.
- 6. **Sources of data and methods of data collection**: primary and secondary sources of information; historical evidence and historical criticism; observation, interviews and questionnaire survey as methods of data collection.
- 7. **Sampling**: basic theory of sampling; Probability and Non-Probability sampling designs.
 - 8. Finding relevant literature and conducting literature review
- 9. Preparing Research Proposal
- 10. **Documentation and presentation**: styles of citation, author-date/reference list and footnote/bibliography methods of citation, quotations, front matter and back matter, formatting research.

Learning Resources:

- 1. Corbetta, Piergiorgio (2003) <u>Social Research: Theory, Methods and TechniquesTrans</u>. Bernard Patrick, SAGE Publication, London.
- 2. Polonski, Michael, Jay and David S. Waller (2004) <u>Designing and Managing Research Project</u> Response Books, New Delhi.
- 3. Huberman, Michael A. and Metthew B.Miles (2002) <u>The Qualitative Research Companion</u> Sage Publications, New Delhi.
- 4. Fischer, Frank, Jerald J. Miller, Mara S. Sidney (eds.), (2007) <u>Hand book of Public Policy Analysis:</u> <u>Theory, Politics and Methods</u>, CRC Press, Taylor and Francis Group, London.
- 5. Babbie, E.Earl (2010) <u>The Practice of Social Research</u> 12the edition, Wadsworth Publishing Co., Belmont, California.
- 6. Turabian, Kate L., (1995) <u>A Manual for Writers of Term Papers, Theses, and Dissertations</u> 6th ed. Chicago University Press, Chicago.
- 7. Prior, Linday (2003) <u>Using Documents in Social Research</u> SAGE Publication, London
- 8. Goode, W.J. and Hatt, Paul K., (1952) <u>Methods in Social Research</u> McGraw-Hill, Tokyo. Labovitz, Sanford and Robert Hagedorn (1981) Introduction to Social Research . McGraw-Hill, New York.
- 9. Gray, Ann (2003) Research Practice for Cultural Studies Sage Publications, London.
- 10. Johnson, Janet and Richard A. Joslyn (1991) <u>Political Science Research Methods</u>, 2nd ed., Washington D.C.
- 11. Baker, Therese L. (2003) <u>Doing Social Research</u> 3^{rd} ed., McGraw-Hill, New York
- 12 Neuman. W. Lawrence (2006) Social Research Methods 6th edition, Dorling Kindersley, Delhi
- 13. Pryke, Michael, Gillian Rose and Sarah Whatmore <u>Using Social Theory</u> (ed) (2003) Sage Publications, London.6

Course Code: SBS-652	SOCIAL THEORIES	Cr. Hrs. 3 (3+0)

Course Description:

This course introduces the importance of theory in social sciences. It provides a brief discussion about emergence of classical sociological thought and its culmination as a theoretical approach to the complexities and challenges of the time. The course particularly focuses on contemporary sociological theories and their utility to understand and predict the character and dynamics of social world. Therefore, the course provides an overview of major classical theorists like Karl Marx, Emile Durkheim and Max Weber to set the stage for later theoretical interventions. After classical theorists, the course would contextualise contemporary social theory in the context of debates regarding modernity, post-modernity, feminism, globalization, consumerism and epistemic political agendas i.e. subaltern studies, Frankfurt school and decolonization etc.

Learning Objectives:

- To introduce students to some of the major classical and contemporary theoretical perspectives in sociology.
- To evaluate sociological theories critically in the local and global context.

Course Content:

1. Introduction and Development of Sociological Theory

- a. Enlightenment and emergence of theoretical rationality
- b. French revolution and reasoning
- c. Industrial age and capitalism

2. Classical Social Theories

- a. Emile Durkheim: Division of Labour and Suicide
- b. Karl Marx: Alienation and Discussion of Class Struggle
- c. Max Weber: Authority, Bureaucracy and Modern Statecraft

3. Contemporary Social Theories

- a. Modernism: Textures of Modern Society and Philosophical Movement
- b. Post-Modernism: The Post-Modern Condition and Critique of Modernism
- c. Theory of Structuration: Debate about Structure and Agency
- d. Evolving Theory of Gender: Feminism and Queer Mode
- e. Selective Readings of French Theorists
 - 1. Michel Foucault ii) Pierre Bourdieu iii) Bruno Latour iv) Jacques Derrida v) Simone de Beauvoir.
- f. Decolonization and Epistemic Plurality
 - o Subaltern Studies ii) Epistemologies of South iii) Frankfurt School

Learning Outcomes

After studying this course, students will be able:

• To develop a greater understanding of social forces affecting behavior and a greater sense of social responsibility

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team-based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources:

- 1. Appelrouth, S., &Edles, L. D. (2010). *Sociological theory in the contemporary era: Text and readings.* Pine Forge Press.
- 2. Bronner, S. E., & Kellner, D. (1989). Critical theory and society: A reader. Psychology Press.
- 3. Buechler, S. M. (2016). *Understanding social movements: Theories from the classical era to the present.* Routledge.
- 4. Calhon, C. (2007). Contemporary sociological theory. (2nd ed.). Malden, USA: Blackwell Publishing.
- 5. Calhoun, C., Gerteis, J., Moody, J., Pfaff, S., & Virk, I. (2012). *Classical sociological theory*. John Wiley & Sons.
- 6. Cooley, C., H. (1962). Social organization, New York: Scrichnes Books.
- 7. Coser, L. A. (1971). *Master of sociological thought; Ideas in historical social context*. New York, Harcourt Brace.
- 8. Dubin, R. (1978). Theory building. New York, Maxwell, Macmillan.
- 9. Farganis, J. (2000). *Readings in social theory: The classic tradition to post-modernism* (3rded.). Boston: McGraw Hill.
- 10. Imasheff, N. & Theoderson, G. A. (1976). *Sociological theory: Its nature and growth*. New York: Random House.
- 11. Kinloch, G. C. (1977). *Sociological theory: Its development and major paradigms*. New York: McGraw Hill.
- 12. John, J. M. (2004). Sociology. (10th ed.). Hardcover.
 - 13. Piketty, T. 2014. Capital in the 21st Century. Cambridge: Belknap Press.
 - 14. Ferguson, S. 2019. Women and Work. Feminism, Labour, and Social Reproduction. London: Pluto.
- 15. Pillai, V. K., & Wang, G. S. (2018). Overview of rights in classical and contemporary sociological theories. In *women's reproductive rights in developing countries*. Routledge.
- 16. Ritzer, G. (2002). Sociological theory (10th ed.). New York: McGraw Hill.
- 17. Ross, H. L. (1963). Perspectives on the social order. New York: McGraw-Hill Book Company, Inc.
- 18. Turner, J. H. (1987). The Structure of sociological theory. Homewood Illinois; Dorsey Press.
- 19. Waters, M. (1994). Modern Sociological Theory. Sage

HEALTH COMMUNICATION AND MASS MEDIA

Cr. Hrs. 3 (3+0)

Course Description:

This course is premeditated to advance learning of health communication theory, research, and practice. It emphasizes on evaluating and conducting health communication campaigns including planning, initiation, and assessment. This course cultivates a broader approval for and understanding of the importance, value, and impact of health communication upon patients, families, caregivers, nurses, physicians, and health care managers. Health communication encompasses the study and use of communication strategies to inform and influence individual and community decisions that enhance health. This course links the domain of communication and health. It specifically looks at new age web-based and mobile media which heavily influences the health seeking behavior of the masses.

Learning Objectives

- To comprehend the values of health encouragement, including health communication promotions and personal support of health behaviors
- To enhance the capability to take on in rational investigation and review of existing efforts to endorse or improve health communication
- To understanding communication between doctor-patient and nurse-patient
- To gain knowledge of organizational communication in health care organization
- To understanding the relationship between care providers

Course Contents

- 1. Introduction to Health Communication
- 2. Why is Health Communication Important?
- 3. How Theory Shapes Health Campaigns?
- a. Social, Cultural, & Environmental Factors, Perceptive & Cognitive Factors
- b. Behavioral Approaches to Health Communication Health Campaigns: Design and Evaluation
 - 4. Doctor-patient Communication
 - 5. Nurse-patient Communication
 - 6. Indigenous Models for Interventions in Health Communication:
 - 7. Healthcare Journalism
 - 8. Multicultural communication
 - 9. Social Media and Public Health Policy
 - 10. Trends in News coverage of Health: Media Ethics
 - 11. Media Advocacy and Advertising
 - 12. New Media and Public Health
- a. E-Health Applications
- b. Telemedicine

Learning Outcomes

After studying this course, students will be able:

- To imply communication and health theories to assist in explaining the deliverance of health care.
- To investigate, examine, and write about health communication problems.
- To have better understanding of how socio-historical, social, political, and cultural aspects influence health communication and healthcare.
- To understand manufacture research and personal knowledge on narrative making sense of illness
- To depict the communication of patients, health caregivers, and family caregivers and how the standpoints inform, differ from, and interconnect with one another
- To describe the role of communication in maintaining health and coping with illness and death
- To apply the techniques and trends of mass media for health communication

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources

- 1. Awad, S., (et al.). (2005). Bridging the communication gap in the operating room with medical team training. *The American Journal of Surgery*. 1 (90) 770-774.
- 2. Arora, V.J., Lovinger, J. Humphrey, D. & Meltzer, D. O. (2005). *Communication failures in patient sign-out and suggestions for improvement: A critical incident analysis. Quality & Safety in Health Care.* Vol. 14, 401-407.
- 3. Braddock, C. (et al.). (1999). Informed decision making in outpatient practice: Time to get back to basics. *Journal of the American Medical Association28* (22) 313, 320.
- 4. Foster, G., Taylor, S. J. C., Eldridge, S. E., Ramsay, J., & Griffiths, C, J. (2007). Self-management education program by lay leaders for people with chronic conditions. *Cochrane Database of Systematic*
- 5. Gallagher, W. (2009). *Rapt: Attention and the focused life*. New York: Penguin. P 1-28; 99-132.
- 6. Groopman, J. (2007). How doctors think. Boston: Houghton Mifflin. Pp. 1-26 and 260-269.
- 7. Gawande, A. (2007). *Better: A surgeon's notes on performance*. New York: Henry Holt. Pp. 201-230.
- 8. Guttman, N. (1997). Ethical dilemmas in health campaigns. *Health Communication*, 9(2), 155-190.
- 9. Rubin, D.T., (et al.). (2007). What is the most effective way to communicate results after endoscopy? *Gastrointestinal Endoscopy*, 66.108-112.

- 10. Flay, B. R., & Burton, D. (1990). Effective mass communication strategies for health campaigns.
- 11. Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Science* 107(38)
- 12. Kevin, W. (Edit). (2015). *Health communication in the 21st century*. USA: University of Oklahoma
- 13. Krones, T. (et al). (2008). Absolute cardiovascular disease risk and shared decision making in primary care: A randomized controlled trial.
- 14. Kelly, P. (2005). The seven slide solution. Westport, CT: Silvermine Press.
- 15. Lujan, J., Ostwald, S.K., & Ortiz, M. (2007). Promoter diabetes intervention for Mexican Americans. *The Diabetes Educator* (33) 660-670
- 16. Minkler, M., Fadem, P., Perry, M., Blum, K., Moore, L., & Rogers, J. (2002). Ethical dilemmas in participatory action research: A case study from the disability community. *Health Education and Behavior29*. 14-29.
- 17. Riley, R. G. & Manias, E. (2006). Governance in operating room nursing: Nurses' knowledge of individual surgeons. *Social Science & Medicine*, 62.1541-1551.
- 18. Riley, R. & Manias, E. (2003). Snap-shots of live theatre: The use of photography to research governance in operating room nursing. *Nursing Inquiry*, 10. 81-90.
- 19. Ridder, D. T., Theunissen, N. C. M.&Dulmen, S. M. (2007). Does training general practitioners to elicit patients' illness representations and action plans influence their communication as a whole? *Patient Education and Counseling*. (66)327-336.
- 20. Rich, M., Lamola, S., Amory, C., & Schneider, L. (2000). Asthma in life context: Video intervention/prevention assessment (VIA). *Pediatrics*. 105.469-477.
- 21. Short, K. (2014). Here is the income level at which money won't make you happier in each state. *The Huffington Post*.
- 22. Taylor, S. E. (2002). *The tending instinct: How nurturing is essential for who we are and how we live*. New York: Henry Holt.
- 23. Tufte, E. (2006). Beautiful evidence. Chesire, CT: Graphics Press.
- 24. Wakefield, M. A., Loken, B., & Hornik, R. C. (2010). Use of mass media campaigns to change health behaviour. *The Lancet*, *376*(9748), 1261-1271.
- 25. Wright, K. B., Sparks, L., & O'Hair, H. D. (2013). *Health communication in the 21st century*. Malden, MA: Blackwell Publishing

COURSE CODE: SBS-654 INTRODUCTION TO BIO- Cr. Hrs. 3 (3+0)
MEDICINE

Course Description

What is biomedicine? How do we understand it and how does it understand us? What does it look and feel like in practice? This course will provide opportunities for student exploration of diverse and relevant contemporary themes related to biomedicine, the life sciences, and life itself How does biomedicine operate as a culture, or many cultures, a set of practices, a platform of/for

power, and a social and a techno-scientific force? What is our investment in it and how does it invest us? These are the questions that this undergraduate-level course explores. Drawing broadly from the social sciences and the humanities, and taking biomedicine as an object of inquiry, an episteme, an assemblage, and an aspiration, course readings will illuminate the politics, practices, cultures, economies, and technologies of western biomedicine. Specifically, the course will look at the birth of the clinic; clinical encounters and practices of biomedicine: the medicalization, bio medicalization and pharmaceuticalization of society; biological citizenship and bio sociality; bioeconomies; metricized and molecular medicine; genetics, race, and gender; and, emerging frontiers of biomedicine from the micro biome to astrobiology and space medicine.

Learning Objectives

- To provide opportunities for student exploration of diverse and relevant contemporary themes related to biomedicine, the life sciences, and life itself
- To introduce biomedicine as an assemblage of forces, things, cultures, and episteme.
- To articulate and debate key approaches to the social and cultural studies of biomedicine.
- To enhance the student's verbal and written skills in the discipline of Science and
- Technology Studies

Course Content

- a) Anatomy: Main Structures and Features of the Human Body (Systems, Organs, Tissues);
- b) Cell Biology: The structural Components of the Cells, Organelles of the cells, description and function
- c) Genetics and molecular biology
- d) Human immune defence system
- e) Microorganisms and diseases
- f) Diseases and therapeutics
- g) Traditional and Alternative medicine
- h) Internalized Medicine: Medicalization and Bio-medicalization.
- i) Course Introduction: Understanding Biomedicine as a Political Ecology of Things
- j) The Origins and Ontological Presuppositions of Modern Biomedicine
- k) Molecular Medicine and the Politics of Life Itself
- 1) Race, Genetics, and Personalized Medicine
- m) Visit to laboratories working on advanced cell and molecular biology/ Visit to hospitals/ Visit to traditional clinics

Learning Outcomes

After studying this course, students will be able:

• To understand the social and cultural contexts of biomedicine as they articulate with those of the life sciences, engineering, and public health; the political stakes in biomedical research and practice; and ethical issues at the emerging frontiers of biomedicine and biomedical enhancement.

• To competently articulate and debate key theoretical approaches in the social and cultural studies of biomedicine and understand how the boundaries of both human biology and human ontology are being reconfigured by techno-scientific advances in western biomedicine.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments.

Learning Resources

- 1. Adriana, P. (2010). *Technologies images, technologies bodies. When experiments travel.* Princeton University Press
- 2. Adriana, P. (2013). *Life exposed: Biological citizens after Chernobyl*. Princeton University Press.
- 3. Annemarie, M. (2002). *The body multiple: Ontology in medical practice*. Duke University Press.
- 4. Conrad & Peter. (1992). "Medicalization and social control." Annual review of Sociology
- 5. Jain, L. S., & Malignant. (2013). *How cancer becomes us*. Berkeley: University of California Press.
- 6. Jane, B. (2010). Vibrant matter: A political ecology of things. Duke University Press.
- 7. Jorge, F. M. (2013). Biologics and trade agreements: Defining the new frontier. *Journal of Generic Medicines*, 10(2).doi.org/10.1177%2F1741134314533019
- 8. Joseph, D. (2010). *Pharmaceutical witnessing: Drugs for life in an era of direct-to consumer advertising.*
- 9. Journal of generic medicines: The business *Journal for the Generic Medicines Sector*. 10(2). 105-114
- 10. Lock & Nguyen. (1994). Biomedical technologies in practice. *An anthropology of biomedicine*, 17-31
- 11. Stefan, H. (2009). Species of bio-capital: Science as culture. Princeton University Press.
- 12. Stephen, H. (2008). Making the mio-economy Measurable: Politics of an emerging anticipatory machinery.
- 13. Szasz & Thomas. (2005). The shifting engines of medicalization. *Journal of Health and Social Behavior*.46.3-14.
- 14. Taylor, J, J., Cohen, B. J. (2012). *Memmler's structure and function of the human body*.(10th ed.). Lippincott Williams & Wilkins

COURSE CODE: SBS-655 HEALTH AND ENVIRONMENT Cr. Hrs. 3 (3+0)

This course will study the relations between human health and environment. Environment is the habitués i.e. the entire living conditions as provided by nature and its response by the society and culture. Environment determines largely what we eat, drink, breath and wear and as a result what types of diseases occur and also generally their treatment. This course will debate all this. Issues like the health impacts of air pollution, noise pollution, water pollution, hazardous and solid waste, radiation, toxic substances and climate change will be part of this course. Environmental health issues in Pakistan and Global Warming will also be discussed.

Learning Objectives

- To enable the participants to identify and describe the important current and emerging environmental issues that pose risk to human health
- To learn how to apply multidisciplinary environmental health approaches to solve environmental issues
- To learn effects of environment on human health
- To learn the major sources and types of environmental agents

Course Contents

- 1. Environment and Issues
- 2. Air Pollution, its Hazards and Prevention
- 3. Noise Pollution, its Hazards and Prevention
- 4. Water Pollution, its Hazards and Prevention
- 5. Water Purification
- 6. Radiation, its Hazards and Prevention
- 7. Waste Management
- 8. Ozone Layer Depletion
- 9. Climate Change and its Effect on Health
- 10. Impact of environment on Human Health
- 11. Environmental and Health Issues in Pakistan
- 12. Sanitation Status and Options in Pakistan
- 13. Human role in Environment Management

Learning Outcome

After the completion of the course, students will be able:

- To have awareness of environmental hazards with well-known and probable risks.
- To understand how hazards are formed and their spreading in the environment, and how to assess their possible effects in humans.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources:

- 1. Aron, J. L., Patz, J. A. (2001). Ecosystem change and public health: Aglobal perspective. Baltimore: Johns Hopkins University Press.
- 2. Lippmann, M., Cohen, B. S., & Schlesinger, R. B. (2003). Environmental health science, (2nded.). New York, NY: Oxford University Press.
- 3. Moeller, W. D. (1997). Environmental health (2nd ed.). Cambridge: Harvard University Press.
- 4. Moore, G. S. (2002). Living with the earth: Concepts in environmental health science. (2nded.). Boca Raton, FL: Lewis Publishers.
- Nadakavukaren, A. (1990). Man and environment: A health perspective prospects. (3rded).
 Heights, IL: Waveland Press
- 6. Sellers, C.C. (1997). Hazards of the Job: From industrial disease to environmental health science. Chapel Hill: University of North Carolina Press

Vesilind, P. A., &Pierce, J. J. (1983). Environmental pollution and controlleducation. (4thed.). Boston MA: Butter worth Publishers.

SEMESTER VI

COURSE CODE: SBS-661 HOSPITAL MANAGEMENT Cr. Hrs. 3 (3+0)

Course Description

This course is designed to give the basic understanding about how the hospitals functions. In this course, students will be introduced about the implementation of management theories in different operational areas of hospitals such as inventory management, hospital waste management, pharmacy management, disaster management, etc. Moreover, students will be guided about the management techniques relevant to the health care marketing and the specific policies to grab the market opportunities.

Objective

This course will provide the basic understating regarding management and other issues faced by a hospital and to deal with these issues in both Public and Private sector hospitals at all levels.

Course Outline

- 1. Introduction to Health Care System
 - Hospital System
 - Role of Hospital in Health Care
- 2. Management
 - Principles of Management
 - Theories of Management
 - The Management Process
 - Effective Hospital Management:
 - o Planning and Organizing
 - o Directing and Leading
 - Controlling
- 3. Hospital Planning
 - Preparing a Hospital Budget
 - Infrastructure Management
 - Inventory Management
 - Medical Records Keeping
 - Health Care Marketing
- 4. Support and Utility Services
 - Hospitals Equipment Management
 - Management of Laboratory and Services
 - Pharmacy Management
 - Emergency Response and Disaster Management

- 5. Risk management
 - Hospital Waste Management
 - Nosocomial Infections
 - Hospital Security Services
 - Occupational Safety in Hospitals
- 6. Recent Advances in Hospital Management
 - Health Care Financing
 - Health Care Insurance
 - Effective Media Communication
 - Telemedicine
 - Medical Tourism
- 7. Challenges to Hospital Administration
 - Challenges to Hospital Administration Strategies

Learning Outcomes

After studying this course, students will be able to:

- Understand the healthcare system and management of hospitals
- Get knowledge about the theories of hospital management
- Learn about how to deal with the operational issues of hospitals
- Understand about maintenance of records and other administrative work
- Maintain the financial records, prepare budgets and asses risk
- Get knowledge about the budgeting, auditing and inventory management
- Know about health care marketing and how to develop hospital community relationship

Learning Resources

- Sakharkar, B.M. (2004) Principles of Hospital Administration and Planning, Latest Edition, Jaypee Brothers, Medical Publishers, 2004, ISBN 8171796095
- 2. Joshi, D.C., and Mamta, J. (2009). Hospital Administration, Jaypee Brothers, Medical Publishers Pvt. Limited
- 3. <u>Buchbinder</u>, S.B., and <u>Shanks</u>, N.H. (2007). Introduction to Health Care Management, Sudbury, Mass: Jones and Bartlett Publishers
- 4. <u>Thomas</u>, R.K. (2009). Marketing Health Services, Second Edition, Health Administration Press ISBN-13: 978-1567933369
- 5. Kunders, G.D. (2017) Hospitals Facilities Planning and Management, Mcgraw; 1st edition, ISBN-13: 978-0070502697

COURSE CODE: SBS-662 **HEALTH PSYCHOLOGY Cr. Hrs. 3 (3+0)**

Course Description:

This course bridges the domains of biology, sociology and psychology. It examines the complex and fascinating ways psychology and behavior interact with health. It also discusses the risk factors for health-compromising behaviors, how to promote and maintain healthy behaviors, prevent and treat illness, and adapt and thrive in the context of chronic illness. The course will highlight the diverse perspectives on illness perception, health decision making, education and stress coping of patients, health care professionals and caregivers.

Learning Objectives

- To understand the biological, behavioral, cognitive and social determinants of health, the risk factors for health-compromising behaviors and strategies for their modification
- To understand health-relevant interactions amongst family members and between healthcare consumers and health-care providers, collaborative relationships in multidisciplinary health care teams, and ethical considerations affecting both practice and research in health psychology
- To demonstrate advanced knowledge of individual, group and community-based approaches to the management and prevention of major identifiable health concerns and problems (both acute and chronic conditions).

Course Content:

- 1. Major Theories and Models of Health Psychology Interventions
 - a. Roles for health psychologists, including indigenous and rural health
 - b. Self-management of chronic illness & disabilities.
- 2. Physical Systems and Mind Body Interactions
 - a. Physical systems of the body
 - b. Psychophysiology of health and illness
 - c. Basic neuro-anatomy
 - d. History of thinking about mind-body interactions.
- 3. Stress and Health
 - a. Stress, emotions and health applications to somatising and conversion disorders
 - b. Mind-body applications to headaches and obesity
- 4. Stress and Development
 - Mind-body applications to sleep problems, chronic fatigue syndrome
- 5. Chronic Pain
 - Models and interventions, injury rehabilitation and compensation
- 6. Acute Pain
 - Models and interventions, preparation for surgery, inter-professional collaboration

- 7. Substance Use
 - a. Addiction, alcohol and other drug use preventions
 - b. Treatment and relapse prevention
- 8. Motivational Interviewing in Health Context
- 9. Health Psychology Practice in Rural and Remote Areas
 - a. Health behavior change and health promotion in primary care
 - b. Issues in rural health psychology practice
- 10. Health Psychology in Early Life
 - Reproduction, infants and children
- 11. Health Psychology in Late Life
- a. Ageing, death and dying
- 12. Violent behavior and mental health
- 13. Sexual practices and psychology of deviance, rape, child molestation

Learning Outcomes

After studying this course, students will be able:

• To develop insight in students about the psychological influences on health, with an emphasis on the application of psychological principles to health care delivery and disease prevention.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments, reflections, clinical visits in hospitals (to develop their professional and critical awareness of techniques and developments in health psychology)

Learning Resources:

- 1. Argyle, M. (2013). The psychology of happiness. Routledge.
- 2. Baum, A., Revenson, T. A., & Singer, J. (2012). *Handbook of health psychology.* (2nd ed.). Psychology Press.
- 3. Brannon, L., Feist, J., & Updegraff, J. A. (2013). *Health psychology: An introduction to behavior and health.* (8th ed.). Cengage Learning.
- 4. Davis, M., Eshelman, E. R., & McKay, M. (2008). *The relaxation & stress reduction workbook* (6th ed.). New Harbinger Publications.
- 5. Sanderson, C. A. (2012). *Health psychology*. Wiley Global Education.

COURSE CODE: SBS-663

ADVANCED METHODS IN HEALTH Cr. Hrs. 4 RESEARCH (4+0)

Course Description

The course provides an overview of the range of qualitative and quantitative research methods that are available in health research and divided into two parts. In the first part, students will learn to investigate the social world using a variety of qualitative approaches, such as in-depth interviewing techniques, observation, and textual analysis. In the second part, students will learn about basic quantitative statistics methods including graph designing, descriptive statistics, regression analysis, etc.

Learning Objectives

The learning objectives of this course are:

- 1. To provide students with the advance knowledge of different research methodologies that are available to carry out health research
- 2. To enable students to identify the problems, instruments for data collection and multiple techniques for data analysis
- 3. To prepare students to carry out their own research in social science of health; and
- 4. To enable students to design their own research report accordingly.

Course Outline

1. Qualitative Data Analysis

- Translation and Transcription
- Thematic Analysis

2. From Codes to Theory

- Codes: Open, Axial, Selective
- Writing themes and categories
- Developing a theory
- 3. Ethical Issues in Qualitative Research
 - Dealing with Vulnerable Populations
 - Rights of the field researcher
- **4.** Reporting and Presenting Qualitative Data
 - Reflexivity
 - Displaying Qualitative Evidence
- 5. Quantitative Data Analysis
 - Basic Data Analysis:
 - Descriptive Data Analysis
 - o Entering Data in SPSS
- **6.** Univariate Analysis
 - What is univariate analysis
 - How to perform univariate analysis using SPSS

- **7.** Bivariate Analysis
 - How to perform Bivariate analysis
 - Tests of mean differences
 - Analysis of variance ANOVA
- **8.** Regression Analysis
 - Regression analysis using SPSS
 - Interpretation of results
- **9.** Research Report Writing
 - Content of research paper:
 - i. Abstract
 - ii. Introduction
 - iii. Methodology
 - iv. Data analysis
 - v. Interpretation of results
 - vi. Conclusion
 - vii. Acknowledgement
 - viii. References

Learning Outcomes

After completing this course, students will be able to demonstrate knowledge and understanding of:

- the paradigms deployed by qualitative and quantitative health research;
- the main methods used in health research;

Learning Resources

- 1. Saldaña, J. (2015). The coding manual for qualitative researchers. Sage.
- 2. Aneshensel, C. S. (2002). *Theory based data analysis for the social sciences*. Thousand Oaks, Calif: Pine Forge.
- 3. Baily, K. D. (1982). *Methods of social research*. (2nd ed.). N.Y: Free Press.
- 4. Bryman, A., & Burgess, R. G. (1994). Analyzing qualitative data. London: Routledge.
- 5. Burgess, R. G. (1984). In the field: An introduction to field research. London: Allen & Unwin.
- 6. Kleinman, S. (2007). Feminist field work analysis: Qualitative research methods. Los Angeles: Sage.
- 7. Neuman, W. L. (2000). *Social research methods: Quantitative approaches*. Boston, Ally & Bacon.

COURSE CODE: SBS-664 MEDICAL ANTHROPOLOGY Cr. Hrs. 3 (3+0)

Course Description

This course of medical anthropology aims at introducing the students to empirical relationship between culture, society and health. It will further acquaint students to cross-cultural studies of health, disease and illness. We will discuss the importance of social and cultural dynamics in governing the nature and occurrence of disease in a population and the style in which people respond and relate to the delivery of health care service and modern medicine. The course also examines different approaches to medical anthropology, theoretical developments in the field of medical anthropology i.e. evolutionist perspectives, interpretative, postmodern and critical medical anthropological approaches, etc. It also covers relationship between anthropology and biomedicine. The topics to be discussed include traditional medicine (saints, shrine, hakim, shamans), modern-medicine (doctors, hospitals, clinics, psychologists, etc.), and other topics like birth, death, persons, bodies, power, medicine, politics, globalization, public health, decision making and health seeking behavior, etc.

Learning Objectives

- To explain the Research Paradigm of Medical Anthropology.
- To analyze the cultural and social foundation for current health issues and differences.
- To find out the exclusive health beliefs and practices of traditional communities.

Course Contents:

1. Introduction to Medical Anthropology

- Definition and History of Medical Anthropology
- Debating Cultural Relativism, Application and Medical Anthropology
- Nature versus Nurture
- Ethno-medical Narratives: Health Seeking Behavior and Explanatory Models of Health and Illness

2. Methods and Theories in Medical Anthropology

- Qualitative Methods in Health Research: Community Based-Participatory Research,
 Rapid Ethnographic Assessment, Group Interviews, the Life Course Approach, etc.
- Cultural Competence and Health Provision: Research Ethics
- Evolutionist, Meaning-Centered, Post-Modern and Critical Medical Anthropological Perspectives

3. Ethno-medicine: Healing and Healers

- What is Ethno-medicine: Indigenous and Folk Medicine System
- Typologies of Healing Systems
- Religion, Ritual and Healing

- Inherited Healing Epistemologies
- Why Do Non-Medical practitioners Successfully Heal?
- Bio-Medical Regime

4. Understanding Health, Illness, Disease and Cure

- Differentiating Disease and Illness, Folk Understanding versus Biomedical
- Disability and Cultural Construction of Disability
- Human Rights and Health
- Informal Care and Caregivers
- Illness Narratives

5. Food, Body and Health

- Social Theories about Human Body
- Discourses of Diet and Appetite (Civilizing Appetite)
- Diet, Culture and Health
- Body in Consumer Culture
- Mindful Bodies, Cyborg Bodies and Medicalization

6. Contemporary Biological Debates in Medical Anthropology

- Epigenetics and Biological Evolutionism
- Transplant and Cultural Bodies
- Surrogacy, Reproductive Technologies and Kinship

7. Global Health and Structural Inequities

- Medical Pluralism and International Super Structure
- Politics of Resources and Access to Health
- Representations of Developed/Under-developed and Third world as Health Systems
- Biomedicine, Pharmaceutical Industry and Capitalist System
- State, Society and Individual in Global and Local Medical Systems
- Politics of Legalizing Health as Universal Right

8. Cross Country Comparison of Life Cycle Rituals and Health

- Growing up
- Marriage
- Births
- Aging
- Deaths

Learning Outcomes:

After studying this course, students will be able:

• To discuss the ways in which ideas regarding health, illness, and treatment are socially

- constructed
- To analyze biomedicine as a cultural system and the nature of its spread around the globe
- To recognize the value of anthropology in understanding medicine and healing
- To break down complex academic journal articles into thesis, main points, and supporting evidence
- To conduct and present independent research on current popular health topics
- To successfully apply the arguments presented in academic articles to non-anthropological writing

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

- 1. Fadiman, A. (1997). The spirit catches you and you fall down: A Hmong child, her American doctors, and the collision of two cultures. Farrar, Straus, and Giroux.
- 2. Last, M. (1981). The importance of knowing about not knowing. *Social science and Medicine*, 15B: 387-392.
- 3. Le Fanu, J. (1999). The rise and fall of modern medicine. London: Abacus.
- 4. Lock, M. (2002). *Twice dead: Organ transplants and the reinvention of death*. Berkeley: University of California Press.
- 5. Montross, C. (2007). *Body of work: Meditations on mortality from the human anatomy lab.* Penguin Books.
- 6. Moore, E. (1993). Gender, power, and legal pluralism: Rajastan, India. *American Ethnologist*. 20, (3).522-542.
- 7. Murphy, R. (1990). *The body silent: The different world of the disabled*. New York: W.W. Norton.
- 8. Ong, A. (1988). The production of possession: Spirits, and the multinational corporations in Malasia. *American Ethnologist*.15.28-41.
- 9. Parker, R. (2001). Sexuality, culture, and power in HIV/AIDS research. *Annual Review of Anthropology*30.163-179.
- 10. Pool, R.,& Wenzel, G. (2005). *Medical anthropology: Understanding public health*. England: Open University Press.
- 11. Rhodes, I. (1996). Studying biomedicine as a cultural system. *Medical anthropology: A handbook of theory and method*, 159-173.
- 12. Scheper-Hughes N. (1990). Three propositions for a critically applied medical anthropology. *Social Science and Medicine*.30.189-197.
- 13. Singer, M.,& Hans, B. (2012). *Introducing medical anthropology: A discipline in action. New York.* Rowman and Little Field Publishers.

COURSE CODE: SBS-665 COMMUNITY AND MEDICAL Cr. Hrs. 4 (4+0) SOCIAL WORK

Course Description

The course is designed to introduce students to the theoretical and practical framework of association between community and the social work concerning, access, availability and utilization of medical facilities. With an initial grounding in the discourse around development, this course further examines the effectiveness of the community dimensions around the questions of class, gender, race and their social and economic needs faced as respective communities. Moreover, it focuses to develop skills of a good community social worker by introducing the concepts of community mobilization, supportive staff in times of critical moments and as guides for achievement of common goals i.e., to improve health system.

Learning Objectives:

- To identify the major concepts, practices and principles of community social work in medical settings.
- To assess the effectiveness of the social work as community mobilizer in solving social and economic problems of local communities.
- To describe the roles of an effective community development worker or organizer.
- To understand the process of health infrastructure as a place of community well-being policies and strategies for health and community development.
- To develop skills to help people and build capacity to improve the quality of health care.

Course Content:

COMMUNITY

- a. Concept, types and mapping of Communities
- **b.** Community/Resource Mobilization

DEVELOPMENT

- c. Contested reality of 'Development'
- d. Theories of development
 - i. Modernization theory
 - ii. Dependency theory
 - iii. Post-development theory
 - iv. Feminist theories of development
- e. Culture and Development

COMMUNITY DEVELOPMENT PROJECT CYCLE

- f. Frameworks for community development
- g. Project Cycle
 - i. Needs Assessment/Situational analysis
 - ii. Defining/Planning/SMART Goals/Inputs/Resources
 - iii. Implementation
 - iv. Monitoring and Evaluation

MEDICAL SOCIAL WORK

h. History of Medical Social Work

- i. Roles and Principles of Social Workers
- j. Types of Hospital Social Work
 - i. Public Health, Rehabilitation
 - ii. Medical Social Work
- k. Understanding vulnerable groups: Orphans, People with Disabilities
- 1. Medical research and literature review
- m. Hospital Ethnography
- n. Ethics and legal aspects of community development and social work

Learning Outcomes:

After studying this course, students will be able:

- To use principles of community development to contribute to the social wellbeing.
- To design and execute community based projects related to wellbeing issues.
- To enrich health research, policy and practice as an effective community development facilitator
- To organize and mobilize the people for common interests of the community, especially to develop suitable health care system for community.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

- 2. Baum, F. (1999). Social capital: is it good for your health? Issues for a public health agenda. Journal of Epidemiology and Community Health, 53, 195-96.
- 3. Beder, J. (2013). Hospital social work: The interface of medicine and caring. Routledge.
- 4. Biehl, J. & Petryna, A. (2013). When People Come First: Critical Studies in Global Health: Princeton. NJ: Princeton University Press.
- 5. Bopp, M., & Bopp, J. (2011). Recreating the world: A practical guide to building sustainable communities (3rd ed.). Calgary, AB: Four Worlds Press.
- 6. Cesar M. Garces Carranza, Social Work in the Hospital Setting: Interventions (Bloomington: Trafford Publishing, 2013)
- 7. Callahan, D. The WHO definition of 'health'. Hasting Center Studies 1(3), 77-87. (1973).
- 8. Cox, R., & Findlay, G. (1990). Community development health project: a review of achievements so far. Health Promotion Service, Cambridge.
- 9. DeFilippis, J. (2001). The myth of social capital in community development. Housing Policy Debate, 12 (4), 781-806.
- 10. Diamond, J. (2004). Local regeneration initiatives and capacity building: whose 'capacity' and 'building' for what? Community Development Journal, 39(2), 177-89.
- 11. Eade, D. (1997). Capacity building an approach to people-centered development. Oxfam,

Oxford.

- 12. Finn, J. L., & Checkoway, B. (1998). Young people as competent community builders: a challenge to social work. Social Work, 43, 335-45.
- 13. Flexner, A. (2001). Is social work a profession?. Research on social work practice, 11(2), 152-165.
- 14. Knapp, H. (2008). Introduction to social work practice: a practical workbook. Sage Publications.
- 15. Lewis, D. (2012). Anthropology and development: the uneasy relationship. In A Handbook of Economic Anthropology, Second Edition. Edward Elgar Publishing.
- 16. Sarah Gehlert and Teri Browne, eds., Handbook of Health Social Work, 2nd ed. (New York: Wiley-Blackwell, n.d.),
- 17. Gibbon, M., Labonte, R., & Laverack, G. (2002). Evaluating community capacity. Health and Social Care in the Community, 10(6), 485-91.
- 18. Gilchrist, A. (2003a). Community development and networking for health, in Public Health for the 21st Century: new perspectives on policy, participation and practice. J. Orme et al., eds., Open University Press, Buckingham, pp. 146-59.
- 19. Saleebey, D. (1996). The strengths perspective in social work practice: Extensions and cautions. Social work, 41(3), 296-3

SEMESTER VII

COURSE CODE: SBS-671 HISTORY OF MEDICINE Cr. Hrs. 3 (3+0)

Course Description

This course explores the history of modern health and healing from its pre-modern roots to the present. The course investigates the social, cultural, and intellectual contexts of medicine--broadly defined--and look closely at practitioners, sufferers, institutions, ideas, and practices as they developed and changed over time. This course is also a survey of the history of medicine and health care, particularly in Western societies (Europe and North America), from antiquity to the present. Special attention to case studies that provide insight into major discoveries and understanding of disease, illness, medical practitioners and practice in different historical contexts and cultures through the 19th century.

Learning Objectives

- To create awareness of historiographical debates, an ability to assess them critically in relation to the sources on which they are based
- To explore access of information and use it constructively to formulate arguments in a logical way
- To enhance ability to engage in scholarly debate and communicate effectively on historical issues in small group discussions.
- To examine the ways in which the body, health and disease were conceptualized in the
 past, and to situate the major shifts in medical knowledge and practice in the context of
 broader historical changes in Western societies
- To examine the changing role of "the healer" and the "patient" over time and in differing cultural and social contexts
- To track the evolution of some of the major institutional and societal frameworks of medicine and health care embodied in areas of medical education, life science research, and hospital design and health care provision
- To analyze the ways in which human societies and their healers interacted in the face of medical challenges, both in differing times and parallel cultural evolutions.

Course Contents

- 1. Introduction to History of Medicine
- 2. Social History of Medicine
- 3. Health, Disease, and Care in the Ancient Regime
- 4. Ancient Medicine (Before the Classical Age): Greek
- 5. Islamic Golden Age 8th-15th Century
- 6. Ţibb an-Nabawī Prophetic Medicine, Syrian and Persian
- 7. Al-Razi, Ibne-Sina, Al-Kindi, Ibn-al-Nafis

- 8. Medicine in the Renaissance and Scientific Revolution (The herbal: A case study)
- 9. 'Enlightened' Medicine (Introduction to the enlightenment and medicine)
- 10. Alternative Medical Practices: Past and Present
- 11. History of Infectious Diseases and Attitudes Towards them (Plague, smallpox, syphilis, influenza, cholera, tuberculosis, AIDS and others).
- 12. Urbanization, Disease, and Hygiene in the Age of Revolutions
- 13. The 19th Century Medical Marketplace: Changing Bodies
- 14. Epidemic Diseases in the 19th Century
- 15. Scientific Medicine
- 16. Bacteriology
- 17. The Laboratory Revolution in Medicine

Leaning Outcomes

After studying this course, students will be able:

- To different interpretations of the past medicine and caring system.
- To understand critical perspective of a range of medically related primary sources, including images
- To understand of the role of historical practice in appreciating the history of medicine as a discipline
- To have knowledge of history, current status and research in medicine

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

- 1. Ackernecht, E. H. (1982). *A Short history of medicine, Baltimore and London*. The John Hopkins University Press.
- 2. Adler, R, E. (2004). *Medical firsts, from Hippocrates to the human genome*. New Jersey: John Willey & Sons, Inc.
- 3. Bivins, R. (2007). Alternative medicine? A history. Oxford: Oxford UP.
- 4. Canguilhem, G. (1991). The normal and the pathological. New York: Zone Books.
- 5. Fanu, J, L. (1999). The rise and fall of modern medicine. Abacus: London.
- 6. Foucault, M. (1978). *History of sexuality, trans*. New York: R. Hurley.
- 7. Gonzalez-Crussi, F. (2008). A short history of medicine. The modern library: New York.
- 8. Kurz, C. (2005). *Imagine homeopathy: A book of experiments, images, and metaphors*
- 9. Loundon, I. (1997). Western medicine: An illustrated History. Oxford: Oxford UP.
- 10. Nutton, V. (2004). Ancient medicine. London and New York: Rutledge.
- 11. Porter, D. (1999). *Health, civilization and the state, ahistory of public health from ancient to moderntimes*. London: New York.
- 12. Porter, R. (1999). *The greatest benefit to mankind, A medical history of humanity from antiquity to the present*. London: Fontana Press.
- 13. Wynbrandt, J. (1998). *The excruciating history of dentistry*. New York.

COURSE CODE: SBS-672 GLOBALIZATION AND HEALTH Cr. Hrs. 3 (3+0)

Course Description

This course emphasises on diverse theoretical and conceptual understanding of globalization and drivers of globalization, the social, political, economic, technological, telemedicine and environmental spheres of influence and their effects on health and health policy. Other subjects such as increased urbanization, population mobility, and attrition of conventional systems, the global village and climate change will be discussed. Globalization is primarily altering the challenges confronting public health and making over health risks. Globalization have an impact on the health status of populations through its effects on wealth formation and wealth division within and between countries.

Learning Objectives

- To facilitate students to examine and assess key drivers and the different effects of globalization on health
- To discuss theoretical frameworks to evaluate the varied propositions of global change for public health
- To critically evaluate the implications of economic globalization on health inequalities
- To thrash out the effects of developing international policy mechanism on health policy, particularly the limitations on policy alternatives obligatory by agreements beneath the World Trade Organization
- To evaluate the connotations for public health of global warming connected with globalization

Course Content

- 1. Globalization and its Characteristics
- 2. Key Drivers of Globalization
- 3. Introduction to Globalization and Health
- 4. History of Global Health and Globalization of Health
- 5. Globalization and its Impacts on Health
- 6. Theoretical and Empirical Approaches in the Study of Globalization and Health; Case Studies
- 7. Globalization and Health: Emerging Conceptual Frameworks & Empirical Evidence.
- 8. Social and Economic, Political Changes (drivers and processes) Associated with Globalization and their Impact on Health.
- 9. Political and Environmental Transformation (drivers and processes) Connected with Globalization and its Effects on Health.
- 10. Health Issues from a Global Perspective: Infectious and Non-infectious Disease, Pharmaceuticals, Tobacco control, and Food
- 11. Challenges for Developing Global Health Governance

- 12. Nutrition Transition
- 13. Migration, Women, and Labor
- 14. Global Supply Chain and Resource Extraction
- 15. Infectious Diseases, Globalization and Health
- 16. Opportunities and Threats of Globalization: Trade, Food, Nutritional and Global Health
- 17. Opportunities and Threats of Globalization: Bio-war, Bioterrorism and other Evolving Threats to Global Public Health
- 18. The New World of Global Health

Learning Outcomes

After completion of this course, students will be able to:

- Look at opposing conceptions of globalization and varied frameworks for comprehending how globalization have an effects on health
- Observe the impacts for health and health policy of demographic modifications connected with globalization, together with the immigration of health workers
- Geographical spread of diseases
- Implications of climate warming, deforestation/ land clearance, water supply on health
- International disease reporting and surveillance systems

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

- 9. Andrew, L. (2017). *Unprepared: Global health in a time of emergency*. USA: University of California.
- 10. Barry, M. Popkin, L., & Shu, W, N. (2012). Nowandthen: The global nutrition transition: The pandemic of obesity in developing countries.
- 11. Brown, T. M., Marcos, C., & Elizabeth, F. (2006). The World Health Organization and the transition from 'International' to 'Global' public health. *American Journal of Public Health*. *96*(1), 62-72
- 12. Bulletin of the World Health Organization. (2001). Globalization and health: A framework for analysis action.
- 13. Chelsea, C. (2017). Governing global health: Who runs the world and why. UK: Oxford University Press
- 14. Dyck, I., Lewis, N. D., &McLafferty, S. (2001). *Geographies of women's health*. London; New York: Rutledge
- 15. Colin, M.(2013). Global health and international relations. UK: Polity
- 16. Cohen, F., Speier, A. &Frohlick, S. (2015). Kinship travel: Relatedness through international tourism and travel networks. *Anthropologic*,57(1),13-18.

- 17. Corinna, H. (2006). Uneven dietary development: Linking the policies and processes of globalization with the nutrition transition, obesity and diet-related chronic diseases globalization and health
- 18. Cohen, Hillel, W., Robert, M., Gould & Victor, W. S. (2004). Pitfalls of bioterrorism preparedness. The anthrax and smallpox experience. *American Journal of Public Health*, 94,10.
- 19. Ichiro, K., & Sarah, W. (2007). Globalization and health. UK: Oxford University Press
- 20. Friel, S., et al. (2015). Trade policy and public health. Ann Rev Pub Health.
- 21. Gershman J., &Irwin, A. Getting a grip on the global economy: Health outcomes and decoding of development discourse in Hofrichter. *Journal of Health and Social Justice*.
- 22. Garrett & Laurie. (2000). *Betrayal of trust: The collapse of global public health*. New York: Hyperion Press
- 23. Garrett, D. B. The global threats to workers' health and safety on the job. *The New York Times*.
- 24. Huynen, M., Pim, M., & Henk, B. H. (2005). Globalization and health. The health impacts of globalization: A conceptual framework.
- 25. Heyman, David. (2003). Evolving infectious disease threat. *Journal of Human Development*, 4 (2).
- 26. Inhorn, M. C. (2016). Medical cosmopolitanism in global Dubai: A twenty-first-century transnational Intra-cytoplasmicSperm Injection (ICSI) Depot. *Medical Anthropology Quarterly*.
- 27. Johanna, H. (2015). Globalization and health. UK: Open University Press
- 28. Kickbusch, I., Hartwig, K. A., & List, J. M. (2005). *Globalization, women, and health in the twenty-first century*. New York: Palgrave Macmillan.
- 29. Lee, K. (2003). *Globalization and health:An introduction*. Houndmill, England: Palgrave Macmillan
- 30. Lee, K. and Collin, J. (2005). Global change and health.
- 31. López, I. (2008). *Matters of choice: Puerto Rican women's struggle for reproductive freedom.* New Brunswick, NY: Routgers University Press.
- 32. Lunt, N., Horsfall, D., & Hanefeld, J. (2015). *Handbook on medical tourism and patient mobility*. Edward Elgar Publishing
- 33. Nigel, C. (2010). Turning the world upside down: The search for global health in the 21st century. UK: CRC Press
- 34. Rabin, C. L.(2005). *Understanding gender and culture in the helping process: Practitioners' narratives from global perspectives.* (Eds). Belmont, Calif.: Thomson/Wadsworth.
- 35. Ratcliff, K. S. (2002). *Women and health: Power, technology, inequality, and conflict in a gendered world.* Boston, Mass: Allyn and Bacon.
- 36. Scheper-Hughes, N., & Wacquant, L.(2002). *Co-modifying bodies*. (Eds). London: Sage Publications.
- 37. Sara, E. D. Adam, K. S. & Simon, R.(2015). *Disease diplomacy*. USA: Johns Hopkins University Press
- 38. Soysa, I & Gizelis, T, I. (2008). The Natural resource curse and the spread of HIV/AIDS

39. Ted, S. (2009). Labor markets, equity, and social determinants of health in Labonte. globalization and health: Pathways, Evidence and Policy.

COURSE CODE: SBS-699a Research Project I Cr. Hrs. 3 (3+0)

Students will submit their synopsis.

SEMESTER VIII

COURSE CODE: SBS-681 HEALTH POLICY AND PLANNING Cr. Hrs. 3 (3+0)

Course Description

To run the health care system in any country, policy making and implementation is very important. Similarly, planning is crucial to implement the health policy in the country. This course therefore studies different aspect of health policy in cross cultural contexts including Pakistani context. Further it also discusses the planning its concepts, models, types, tools and whole process to understand the importance of planning for the successful implementation of health policy.

Learning Objectives:

- To provide the students basis on how to plan, analyze, improve and develop health policies.
- To enhance the participant's capacity of comprehension of the planning process and to improve
 the planning capacities of health care providers and professionals for the overall health services
 delivery system.

Course Contents:

- 1. Importance and Significance of Planning
- 2. Understanding the Planning Concepts
- 3. Planning Models
- 4. Types of Plans
- 5. Planning Process
- 6. Planning Tools
- 7. Planning Commission of Pakistan
- 8. Pakistan Health Policies
- 9. Health Financing
- 10. Stewardship
- 11. Determinants of Health Policy

Learning Outcomes:

After completing the course, the students will be able:

- To grasp the basic concept of planning, planning models, techniques and tools
- To understands the functions of planning machinery
- To make them understand the important terminology related to health planning for its implementation wherever required

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

- 1. Green A. (1999). *An introduction to health planning in developing countries*. (2nd ed.). Oxford: Oxford University Press.
- 2. Kielmann, A, A, Janovsky K, Annett H. (1995). *Assessing district health needs, services and systems: Protocols for rapid data collection and analysis*. London, UK: Macmillan Education Ltd and AMREF.
- 3. Green A. (1988). An introduction to health planning in developing countries. ELBS London
- 4. Reinke, W, A. (1988). *Health planning for effective management (HPEM)*. New York, NY: Oxford University Press.
- 5. World Health Organization. The world health report (2000): Health systems Improving performance. Geneva: World Health Organization. Retrieved from, http://www.who.int/entity/whr/2000/en/whr00_en.pdf
- 6. Health care financing in Pakistan, World Health Report.
- 7. Green A. (1999). *An introduction to health planning in developing countries*. (2nd ed.). Oxford: Oxford University Press.
- 8. Reinke, W, A. (1988). *Health planning for effective management*. New York, NY: Oxford University Press.

COURSE CODE: SBS-699b Research Project II Cr. Hrs. 3 (3+0)

Students will submit their final thesis project.

COURSE CODE: SBS-600 Internship Cr. Hrs. 3 (3+0)

A compulsory summer internship program

ELECTIVE COURSES

COURSE CODE :SBS-601 GEOGRAPHY OF HEALTH Cr. Hrs. 3 (3+0)

Course Description

The course will provide an academic background to the study of health with a focus on geography and addresses issues like social and spatial health discriminations and inequalities, the role of environment, place and space in health in socio-ecological framework which recognizes the significance of social, physical, political and economic environments in determining health, health conducts and health outcomes. This course will teach to students how geographical methods can be useful in related disciplines, such as public health and epidemiology.

Learning Objectives:

- To find out and describe the key geographical notions about the study of health
- To assess the broader aspects of health and the disparities of health geographically
- To study how geographical inquiry can add to a better understanding of the deviations in health consequences.
- To improve the skills in evaluate health data and geographical information about health

Course Content

- 1. Introduction: What is Health Geography?
- 2. Health Inequalities: Social and Spatial
- 3. Theorizing, Health Inequalities
- 4. Environmental Justice and Health
- 5. Place, Space and Risky Behaviors
- 6. Pakistan's Health
- 7. Austerity and Health
- 9. Policy and Action
- 10. Moving beyond the Behavioral Turn: The way Forward

Learning Outcomes:

After completing the course, the students will be able:

• To evaluate health data and geographical information about health

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials,

- 1. Aitken, S., & Valentine, G. (2006). Approaches to human geography. London: Sage.
- 2. Anthamatten, P., & Hazen, H. (2011). *An introduction to the geography of health*. London: Routledge.
- 3. Biehl, J.,&Petryna, A. (2013). *When people come first: Critical studies in global health*. Princeton, NJ: Princeton University Press.
- 4. Brown, T., McLafferty, S. & Moon, G. (2010). A companion to health and medical geography. Chichester: Blackwell.
- 5. Cummins, S.,& Curtis, S., et al. (2007). Understanding and representing 'Place' in health research: A relational approach. *Social Science & Medicine*, 65(9), 1825-1838.
- 6. Curtis, S. (2004). *Health and inequality: Geographical perspectives*. London: Sage Publications
- 7. Curtis, S. (2004). Health and inequality: Geographical perspectives. London: Sage
- 8. Gatrell, A. (2002). Geographies of health: An introduction. Oxford: Blackwell's.
- 9. Smith, S. J. &Easterlow, D. (2005). The strange geography of health inequalities. *Transactions of the Institute of British Geographers*, 30(2),173-190.

COURSE CODE: SBS-602

POPULATION DYNAMICS AND Cr. Hrs. 3 (3+0) HEALTH

Course Description

The aim of this course is to introduce basic elements of population including: population composition, distribution and size, and the reasons and results of changes in these features. An indication of demographic procedures and measures used to evaluate them is presented. This course also emphases on reproductive health problems significant in the framework of Pakistan. The effect of population programs and policies on population change and health will be discussed. Issues and problems in designing as well as implementing program will also be discussed.

Learning Objectives

- To understand status and trends in population composition, size and distribution.
- To analyze the causes of the changes in characteristics of population and its impact on the health of population.
- To interpret and calculate important procedures used to measure demographic processes: migration, urbanization, fertility and mortality
- To identify the key health issues and socioeconomic, and demographic impact; and make programs to tackle them.
- To analyze the importance and role of population policy in the future health trends.

Course Content

- 1. Fertility and Reproduction
- 2. Fertility Change: Trends, Differentials, Determinants and Theories
- 3. Mortality and Morbidity
- 4. Mortality Decline: Trends, Differentials, Theories and Prospects
- 5. Urbanization: Measurement, Theories, Trends, and Prospects
- 6. Reproductive Health: Biological Processes and Contraceptive Technology
- 7. Components of Health
- 8. Fertility and Infertility: Processes and Management
- 9. Population Policies, Programs and Health

Learning Outcomes

After completion of this course, the student will be able to:

- Describe and contrast population distribution urban vs rural and examine its implications to find out the solution of health issues.
- Identify (describe) the determents and factors of age-sex structure
- Define the link between the population density and health problems.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

- 2. Bobadilla, J. L., Frenk, J. Frejka, T., Lozano, R., & Stern, C. (1993). *The epidemiological transition and health priorities*. Oxford University Press
- 3. DaVanzo, J. (1988). Infant mortality and socio-economic development: Evidence from Malaysian household data. *Demography*.
- 4. Fries, J. F. (1989). The compression of mortality: Near or far? *The Milbank Quarterly*,67(2),208-231.
- 5. Fries, J. F., Green, L. W., & Levine, S. (1989). Health promotion and the compression of morbidity. *Lancet*, 481-483.
- 6. Haupt, A.,& Thomas, T. K. (1998). *Population handbook.* (4thInternational Edition). Washington DC: Population Reference Bureau.
- 7. Hobcraft, J. N., Mcdonald, J. W. &Rutstein, S. O. (1984). Socio-economic factors in infant and child mortality: Across-national comparison. *Population Studies*, *38*, 193-223.
- 8. Horiuchi, S. (1997). Epidemiological transitions in developed countries: Past, present and future.
- 9. McCormic, M, C, Shapiro S, and Horn. S, D. (1970). The relationship between infant mortality rates, medical care and socio-economic variables, Chile 1960-1970. International Journal of Epidemiology.
- 10. Mosley, A, R. Measham, J, L & Bobadilla. (Eds). (1993). *Disease control priorities in developing countries*. New York: Oxford University Press of World Bank.
- 11. Olshansky, S, J & Ault, A, B. (1986). The fourth stage of the epidemiologic transition: The age of delayed degenerative diseases. Milbank Quarterly
- 12. Olshansky, S. J., & Carnes, B. A. (1994). Demographic perspectives on human senescence. *Population and Development Review*, 20(1)57-8
- 13. Omran, A, R. (1971). The epidemiologic transition: Atheory of the epidemiology of population change. Milbank Memorial Fund Quarterly
- 14. Pappas, G., Queen, S., Hadden, W., & Fisher, G. (1986). The increasing disparity in mortality between socio-economic groups in United States, 1960 and 1986. Socioeconomic Disparity in Mortality in US, 329(2), 103-109
- 15. Shryock, H.S. & Jacob S. S. (1978). *The methods and materials of demography*. Academic Press, New York
- 16. Yaukey, D., & Douglas, L. A. (2001). Demography: The study of the human population.

HEALTH ADMINISTRATION

Cr. Hrs. 3 (3+0)

Course Description:

This course will highlight and make a cross culture comparison of the organizational structure and function of public health systems, policies and programs at the local, regional and global level. It will also focus on the health services, financing and workforce management in the governmental and voluntary organizations involved in health-related activities. The course discusses the principles of management, leadership and administration to analyze the impact on health services, access and coverage in diverse setups.

Learning Objectives

- 1. To build knowledge of the distinctive characteristics of private and public organizations involved in health care
- 2. To understand administrative role in the function and services of the public and private sector organizations involved in health-related activities

 To explore the influence of principles of administration on the health services.

Course Content

- 1. Scope and Purpose of Public Health Administration
- 2. Government Public Health Organizations
- 3. Community Based Public Health Organizations
- 4. Health Services
 - a. Bio-medical and traditional/alternative health facilities
 - b. Health care financing, insurance
 - c. Cost and quality control
 - 5. Human Resource Management
 - a. Types of health care workforce
 - b. Work ethics/professionalism
 - c. Motivation and coping
- 6. Organizational Management: Culture and Strategic Planning
- 7. Leadership for Public Health
- 8. Operations Research in Public Health
 - a. Public health informatics
 - b. Program monitoring and evaluation
- 9. Health Care Needs of Vulnerable Populations

Learning Outcomes:

After studying this course, students will be able:

• To apply the knowledge of administrative and management principles to effectively enhance health care services

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

- 1. Bodenheimer, T., & Grumbach, K. (2012). *Understanding health policy*. McGraw Hill Professional.
- 2. Burke, R., & Friedman, L. (2011). *Essentials of management and leadership in public health*. Jones & Bartlett Learning.
- 3. Can, P., & Macdonald, L. (2008). *Principles of administrative law: Legal regulation of governance*. Melbourne: Oxford University Press
- 4. Dale, E. (1997). Management: Theory and practice. London: Mcgraw Hill
- 5. Imam, A. & Dar, E.A. (2013). Administrative history of Pakistan. democracy and public administration in Pakistan. CRC Press
- 6. Institute of Medicine (US). Committee on assuring the health of the public in the 21st century. (2003). *The future of the public's health in the 21st century*. National Academy Press.
- 7. Niazi, H. A. (2003). *Financial administration*. Government and administration in Pakistan, Islamabad. Government of Pakistan.
- 8. Sabharwal, M. (2013). Public administration in South Asia: India, Bangladesh, and Pakistan
- 9. Shahfritz, J, M. (2000). *Defining public administration: Selections from the international encyclopedia of public policy and administration.* (1st ed.). West View Press
- 10. Simon, A. H. (1997). Administrative behavior. Free Press
- 11. Scutchfield, F. D., & Keck, C. W. (Eds.). (2003). *Principles of public health practice*. Cengage Learning
- 12. Turnock, B. (2012). Public health. Jones & Bartlett Publishers

Course Description:

In various arenas of life, we are presented with claims that may seem persuasive and there arises a need to establish the validity or soundness of these claims to reach a conclusion. The process of reasoning is confounded by distortions, biases and prejudices. This course will facilitate in understanding how and why we think what we think. It will discuss basic concepts related to logic, fallacies, truth and describe some tools and techniques for logical and critical reasoning.

Learning Objectives

- 1. To build knowledge of the different tools and techniques for logical reasoning.
- 2. To understand various types of logical fallacies and identify their usage in different contexts.
- 3. To practice systematic application of different reasoning approaches.

Course Content

- 1. Basic concepts of Logic
 - a. Propositions
 - b. Arguments (Deductive and Inductive)
 - c. Validity and Soundness
 - 2. Standards of

Opportunities and

- Critical thinking
 - Barriers
- 3. Classical Deductive Logic
 - a. Immediate inferences: Square of opposition, obve rsion, conversion, and contraposition
 - b. Syllogism: Categorical, Hypothetical and Disjunctive
- 4. Modern Deductive Logic
 - a. Truth Tables
 - b. Quantification and Statistical Reasoning
- 5. Inductive Logic
 - a. Generalization and Analogy
 - b. Causal inferences
 - c. Scientific hypothesis
- 6. Fallacies
 - a. Relevance, Presumption, Ambiguity
 - b. Insufficient evidence
- 7. Sources of information: Content, Author, Audience

- 8. Writing argumentative essays
- 9. Thinking critically about the media, science and morality

Learning Outcomes:

After studying this course, students will be able:

• To understand, critically analyse and evaluate text or arguments on the basis of logical reasoning

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

Learning Resources

- 1. Bassham, G., Irwin, W., Nardone, H., Wallace, J. Critical Thinking: A Student's Introduction
 - . New York: McGraw-Hill, 2011.
- 2. Copi, I. M., Cohen, C., & Rodych, V. (2016). Introduction to Logic: Pearson New International Edition. Routledge.
- 3. DeHaven, S. L. (1998). The Logic Course. Peterborough, Ont.: Broadview Press.
- 4. Hurley, P. (2014). A concise introduction to logic. Nelson Education.
- 5. Kelly, D. (1988). The Art of Reasoning With Symbolic Logic. NY, WW Norton.
- 6. Layman, C. S. (2001). The power of logic. Mountain view CA, Mayfield Publishing
- 7. McPeck, J. E. (2016). Critical thinking and education. Routledge.
- 8. Moore, B. N., & Parker, R. (2009). Critical thinking. Boston, MA: McGraw-Hill.
- 9. Ruggiero, R, V. Beyond Feelings: A Guide to Critical Thinking. New York: McGraw-Hill

COURSE CODE-SBS-605

ENTREPRENEURSHIP

Cr. Hrs. 3 (3+0)

Course Description:

It is an introduction to the concept of entrepreneurship. The course will cover the characteristics of and types of entrepreneurs, identifying problems and opportunities, creative problem solving, developing a viable business model and entrepreneurial ethics.

Learning Objectives

- To understand basic concepts in the area of entrepreneurship,
- To understand the role and importance of entrepreneurship for economic development,

- To develop personal creativity and entrepreneurial initiative,
- To adopt key steps in the elaboration of business idea,
- To understand the stages of the entrepreneurial process and the resources needed for the successful development of entrepreneurial ventures

Course Content

- 1. Conceptual definition of entrepreneurs and entrepreneurship.
- 2. Historical development of entrepreneurship.
- 3. Benefits and potential drawbacks of entrepreneurship.
- 4. Creativity, innovation and entrepreneurship.
- 5. The importance of small business. Entrepreneurship and economic development. Entrepreneurial strategies and practice.
- 6. Entrepreneurial process. Features and types of businesses and entrepreneurs.
- 7. Entrepreneurial project. Problem to solve (Allocation of individual /group projects)
- 8. Entrepreneurial project: Solution and Key Metrics
- 9. Entrepreneurial project: Customer segmentation and Unique Value Proposition
- 10. Entrepreneurial project: Unfair Advantage and Channels
- 11. Entrepreneurial project: Cost Structure and Revenue Streams
- 12. Guest Speaker Story of their Entrepreneurship
- 13. Pricing strategy, Budgeting and Revenue Projections
- 14. Sustainability
- 15. Entrepreneurial Ethics

Learning Outcomes

By the end of the course students should be able to:

- Develop understanding of the nature of entrepreneurship
- Determine whether you want to be an entrepreneur with your own business or a corporate entrepreneur (entrepreneur in someone else's business)
- Understand how to identify opportunities (problems), develop creative solutions and build a viable business model around these
- Identify and understand the driving forces of new venture success
- Understand the ethical and legitimacy challenges that face entrepreneurs with new ventures
- Sketch out their own business plan.

Teaching Methodologies/Instructional Strategies

Interactive lectures/ team based learning, flipped classroom, critical discussions, group projects/presentations, role-plays, seminars, design thinking (case-method), Journal club, tutorials, ethnographic films, tutorials, written assignments

- 1. List of Textbooks, Journals, Electronic Materials:
- 2. Essentials of Entrepreneurship and Small Business Management Norman M Scarborough
- 3. The Entrepreneur's Guide to A Biotech Startup Peter Kolchins

Course Description

What do new technological discoveries and the interaction of embedded technologies tell us about human beings of today? How are human beings imagined and how is human potential being reconceived in the digital age? What will human beings look like and how will they behave in the future? This course will open up new ways of thinking about the nature of human being in the context of rapid technological and cultural change, as well as asking how human experiences of love, death, culture, gender, identity, community, the body, mind, work and leisure are being transformed in the context of new technologies. What cultural effects and risks follow from treating biology as technology? How have computers changed the way we think about ourselves? Whether technology has produced a better world, and for whom? Cyborg anthropology is about the world transforming event of modern technological development. it is about the new beings that human beings are becoming. Cyborg Anthropology focus on forms of life that are part-human and part-machine.

Learning Objectives

- To explicate the cultural issues raised by the blurring of the conceptual and physical boundaries between human and machine.
- To explore the theoretical basis for analyzing science as a socio-cultural practice.
- To explore deeply textured ethnographic accounts and analyses of how techno science is experienced, understood and is changing our lives
- To elucidate the relationships between science and other socio-cultural institutions and practices.

Course Content

- 1) Cultural History of Technology
- 2) The Anthropology of Computing
- 3) Robots, Agents and Humanlike Machines
- 4) The Blessings and Burdens of Communication: Cell Phones in Jamaican Transnational Social Fields

- 5) What is "Technology" in the Contemporary World?
- 6) What Made "Technology" Necessary?
- 7) Culture: High v. Low; Traditional v. Democratic
- 8) The Marxist Critique of Capitalism
- 9) Modernism: Socio-Economic and Aesthetic
- 10) Virtual Identities and Second Lives

Learning Outcomes

After studying this course, the students will be able:

- To understand the interaction between humanity and technology from an anthropological perspective.
- To develop understanding of contemporary and novel insights on new technological advances and their effect on culture and society.
- To develop understanding of cultural production of human distinctiveness by examining ethnographically the boundaries between humans and machines and our visions of the differences that constitute these boundaries

Teaching Methodologies/ Instructional Strategies

Interactive seminar class, open or group discussions, lectures, tutorials, presentations, ethnographic films

- 1. Adam, A. (1998). Artificial knowing: Gender and the thinking machine. New York: Routledge
- 2. Adriana, P. (2002). *Life exposed: Biological citizens after Chernobyl*. Princeton University Press.
- 3. Boellstorf, T. (2008). *Coming of age in second life*: An anthropologist explores the virtually human. Princeton University Press
- 4. Downey, G. L., & Dumit, J. (1998). *Bodies, antibodies and modest interventions: Works of art in the age of cyborgian reproduction*. School of American Research Press
- 5. Downey, G. L., & Dumit, J. (1998). *Cyborgs and citadels: Anthropological interventions in the borderlands of techno science*. Santa Fe NM: School of American Research.

- 6. Forsythe, D. E. (2001). Engineering knowledge: The construction of knowledge in artificial intelligence. Studying those who study us: An anthropologist in the world of artificial intelligence. Stanford University Press
- 7. Franklin, S., & McKinnon, S. (2001). *In relative values: Reconfiguring kinship studies*. Duke University Press
- 8. Gray, H. C., Sarriera, H. F., & Steven, M. (1996). *The cyborg handbook*. New York and London: Rutledge
- 9. Haraway, D. (1991). A cyborg manifesto: Science, technology, and socialist-feminism in the late twentieth century. New York: Rutledge.
- 10. Haraway, D. T., & Goodeve, N. (1999). *How like a leaf: An interview with Donna Haraway*. New York and London: Rutledge.
- 11. Latour, B. (1996). The love of technology. Cambridge: Harvard University Press
- 12. Margaret, L. & Franklin, S. (2003). *Remaking life and death: Toward an anthropology of the biosciences*. NM: School of American Research Press.
- 13. Rayna, R. (2000). Testing women, testing the fetus: A social history of amniocentesis in America. New York, NY: Rutledge
- 14. Ron, E. (2000). *Cultural cybernetics: The mutual construction of people and machines*. Vienna, Austria: Society for Social Studies of Science.
- 15. Stefan, H. (2001). Kinship in hypertext: Transubstantiating fatherhood and information flow in artificial life. NC: Duke University Press
- 16. Stefan, H. (2004). *The word for world is computer: Simulating second natures in artificial life*. Durham, NC: Duke University Pres
- 17. Wise, N. (2004). *In growing explanations: Historical perspectives on the sciences of complexity*. Durham, NC: Duke University Press

COURSE CODE: SBS-607 HEALTH INFORMATICS Cr. Hrs. 3 (3+0)

A. General Information

1. Course code: SBS-655	Title: HEALTH INFORMATICS	Credit hours: 3-0

2. Description of Course:

Introduction to Health Informatics offers an overview of the field of health informatics by providing students with the fundamental knowledge of the concepts of health informatics and how technology can be used in the delivery of health care. The purpose of this course is to provide students with a basic understanding of "Informatics" and its application in a Public Health setting. The goal of Health Informatics is for students to understand the basic technological tools and building blocks needed to develop and manage Public Health data collection systems to meet analytical needs. Tools required for effective communication and databases for understanding to healthcare system.

Program in which the course is offered: BS Social Sciences of Health

Name of faculty member responsible for the course: Dr. Syed Babar Jamal Bacha

Year/Semester in which this course is offered: 5th Semester of BS Program

Location if not on main campus: NUMS, PWD Campus

B Goal

1. Course Objectives:

The main goal of this course is;

- To identify and demonstrate the various tools used in Information Technology.
- To coordinate and collect those tools into systems, and have the ability to describe how those tools can be used in systems.
- To investigate solutions in Information Technology by using web and other research tools.
- To analyze current healthcare information systems.
- To develop a working vocabulary of Information Technology terminology.
- To demonstrate a working knowledge of the systems development life cycle.

2. Learning Outcomes:

After completing the course, the students will be able:

- To explore how technology can be used to improve health care delivery in health care organizations and in public health.
- To describe the important challenges currently faced by individuals seeking to improve health in each of five key health domains, and describe how information resources, if properly developed and deployed, can help address these challenges.
- To explain why each of the key methods used in health informatics is essential to creating information resources that hold potential to improve health.

- To acquire a basic understanding of educational and instructional design theory and principles and how the principles can be applied to deliver effective training to users of health information systems.
- To discuss informatics as used in Public Health.
- To describe the historical roots of today's Information Technology systems.

C. Course Details

1. Course Syllabus				
List of Topics	Week No	Contact hours		
Health Information Technology & Health Informatics	01	03		
➤ Introduction & Overview				
Key Components of Informatics				
Computers				
Software				
Biomedical Data	02	03		
Data Acquisition, Storage, and Use				
Types of medical data				
Potential role of the computers				
Biomedical Data	03	03		
Strategies of Medical Data Selection & Use				
Relationship Between Data and Hypotheses				
Questions and Comparing Tests				
Health Information Confidentiality, Privacy, Security	04	03		
Confidentiality, Privacy, Security Definitions				
Examples and Law prospective				
➤ Conclusion				
Ethics in Health Informatics	05	03		
Ethics and Bioethics				
Theoretical Approaches to Healthcare Ethics				
Principlism and Antiprinciplism				
Applying Ethics to Informatics				

Usability: Human Factors and User-centered Design	06	03
➤ History of Human Factors		
Human Factors and HCI Redux		
Examples of Application Areas		
Human Factors Design Implications		
Human Factors & Patient Safety	07	03
Medical errors		
Types of Medical Errors		
➤ Factors Causing Errors		
 Actions required to cop Medical Errors 		
Health Communication	08	03
Function of health communication		
Importance of Health Communication		
Health Literacy		
 Identifying Limited Health Literacy 		
MID TERM EXAM	09	
Health Communication	10	03
 Tools and Techniques for Identifying Limited Literacy 		
 Cultural Competency in Health communication 		
 Cultural Factors Influencing Patient-Provider Communication 		
Consumer Health	11	
Healthy People in Healthy Communities		
> Issues		
Evaluating Health Education Programs		
Tele-health, Multimedia & Web	12	03
> Telehealth vs. Telemedicine		
> Telehealth System Models		
> Challenges		
Categorization of Multimedia & Web		
 The impact of technological innovations on our life 		

Data Analytics in Health Care		
 Clinical Data Warehouse 		
Types of Analytics		
Steps in Data Analytics		
Patient Management and Billing		
Resource Management		
Bioinformatics	14	03
What is Bioinformatics		
➤ What do we do in Bioinformatics?		
Applications of Bioinformatics		
Data types along the drug discovery chain		
Computational Approaches in Drug Design		
Database, DBMS and Database Design		03
Database & DBMS		
➤ Role of DBMS		
Data Models		
Relational Model		
Keys and its Types		
Revision/Discussion/Presentations/Assignments	16	03
FINAL EXAM	17, 18	
2. Learning Resources		

L

List of Textbooks, Journals, Electronic Materials:

Lecture handouts and Detailed reading material will be provided.

Reference Books:

- 1. Brender, J. (2006). *Handbook of evaluation methods for health informatics*. London: Elsevier Academic Press.
- 2. Brender, J., Nøhr, C.,& McNair, P. (2000). Research needs and priorities in health informatics. *International Journal of Medical Informatics*, 58, 257-289.
- 3. Coiera, E. (2015). Guide to health informatics. CRC press.
- 4. Conrick, M. (2006). *Health informatics*. Cengage Learning Australia.
- 5. Fried, A. & O'Carroll, P.W. (1998). Public health informatics: Last public health &preventive medicine, 14, 59-65.
- 6. Hovenga, E. J., & Kidd, M. R. (2010). Health informatics: An overview. (151). Ios Press.
- 7. Imhoff, M. (2002). Health informatics. In evaluating critical care. Springer, Berlin, Heidelberg.
- 8. Kurzweil, R. (2001). The age of spiritual machines. New York: Pocket Books.
- 9. Lorenzi, N. M., & Riley, R. T. (2013). *Organizational aspects of health informatics: Managing technological change*. Springer Science & Business Media.
- 10. Stair, R.M., & Reynolds, G.W. (2001). *Principles of information systems*. Cambridge, MA: Course Technologies.