CURRICULUM

OF

BS HOME ECONOMICS

(Revised 2011)

HIGHER EDUCATION COMMISSION
ISLAMABAD, PAKISTAN
CURRICULUM DIVISION, HEC

Dr. Syed Sohail H. Naqvi  Executive Director
Prof. Dr. Altaf Ali G. Shaikh  Member (Acad)
Mr. Muhammad Javed Khan  Adviser (Academics)
Mr. Malik Arshad Mahmood  Director (Curri)
Dr. M. Tahir Ali Shah  Deputy Director (Curri)
Mr. Abdul Fatah Bhatti  Assistant Director (Curri)

Composed by: Mr. Zulfiqar Ali, HEC, Islamabad
# CONTENTS

1. Introduction.........................................................6

2. Scheme of Studies for 4-Year BS in Home Economics.........................13

3. Detail of Courses for 4-Year BS in Home Economics..........................20

4. Detail of Compulsory Courses
   Annex A - E......................................................151

5. Recommendations.................................................168
The curriculum of subject is described as a throbbing pulse of a nation. By viewing curriculum one can judge the stage of development and its pace of socio-economic development of a nation. With the advent of new technology, the world has turned into a global village. In view of tremendous research taking place world over new ideas and information pours in like a stream of fresh water, making it imperative to update the curricula after regular intervals, for introducing latest development and innovation in the relevant field of knowledge.

In exercise of the powers conferred under Section 3, Sub-Section 2 (ii) of Act of Parliament No. X of 1976 titled “Supervision of Curricula and Textbooks and Maintenance of Standard of Education” the erstwhile University Grants Commission was designated as competent authority to develop review and revise curricula beyond Class-XII. With the repeal of UGC Act, the same function was assigned to the Higher Education Commission under its Ordinance of 2002 Section 10, Sub-Section 1 (v).

In compliance with the above provisions, the HEC undertakes revamping and refurbishing of curricula after regular intervals in a democratic manner involving universities/DAIs, research and development institutions and local Chamber of Commerce and Industry. The intellectual inputs by expatriate Pakistanis working in universities and R&D institutions of technically advanced countries are also invited to contribute and their views are incorporated where considered appropriate by the National Curriculum Revision Committee (NCRC).

To bring international compatibility to qualifications held from Pakistani universities/DAIs for promotion of students mobility and job seekers around the globe, a Committee comprising of Conveners of the National Curriculum Revision Committee of HEC met in 2009 and developed a unified template for standardized 4-year/8-semester BS degree programmes. This unified template was aimed to inculcate broader base of knowledge in the subjects like English, Sociology, Philosophy, Economics etc. in addition to major discipline of study. The Bachelor (BS) degree course requires to be completed in 4-year/8-semester, and shall require qualifying of 130-140 credit hours of which 77% of the curriculum will constitute discipline specific and remaining 23% will comprise compulsory and general courses.

In line with above, NCRC comprising senior university faculty and experts from various stakeholders and the respective accreditation councils has finalized the curriculum for BS 4-year in Home Economics. The same is being recommended for adoption by the universities/DAIs channelizing through relevant statutory bodies of the universities.

MUHAMMAD JAVED KHAN
Adviser (Academics)

June, 2011
Abbreviations Used:

NCRC. National Curriculum Revision Committee
VCC. Vice-Chancellor’s Committee
EXP. Experts
COL. Colleges
UNI. Universities
PREP Preparation
REC. Recommendations
LI Learning Innovation
R&D Research & Development Organization
HEC Higher Education Commission
INTRODUCTION

The National Curriculum Revision Committee (NCRC) final meeting was held from March 28-30, 2011 at HEC Regional Centre, Lahore to finalize the draft Curriculum for 4-year BS in Home Economics. Following attended the meeting.

1. **Dr. Rubina Hakeem**  
   Professor & Principal,  
   Department of Nutrition  
   Rana liaqat Ali Khan College of Home Economics  
   University of Karachi, Karachi.  
   **Convener**

2. **Mrs. Ghazala Pervez Zaman**  
   Associate Professor,  
   Department of Food and Nutrition  
   Govt. College of Home Economics  
   Gulberg, Main Baulevard, Lahore.  
   **Secretary**

3. **Dr. Samia Kulsoom**  
   Principal,  
   College of Home Economics  
   Gulberg, Lahore  
   **Member**

4. **Dr. Ghazala Nizam**  
   Principal,  
   College of Home Economics  
   University of Peshawar, Peshawar.  
   **Member**

5. **Mr. Rasheed Siddiqui**  
   Assistant Professor,  
   Department of Art & Design  
   Mirpur University of Science & Technology  
   Mirpur Azad Jammu & Kashmir Muzaffarabad.  
   **Member**

6. **Ms. Azra Munawar Farooqi**  
   Assistant Professor,  
   Department of Art and Design  
   Rana liaqat Ali Khan College of Home Economics  
   University of Karachi  
   **Member**

Karachi.
7. **Ms. Umaira Bilal**  
Lecturer,  
Department of Home Economics  
G.C University, Faisalabad  
Member

8. **Mrs. Samina Bukhari**  
Associate Professor,  
Department of Arts & Design  
Govt. College of Home Economics Gulberg  
Main Baulevard  
Lahore  
Member

9. **Ms. Nuzhat Dar**  
College of Home Economics  
University of Peshawar  
Peshawar  
Member

10. **Ms. Khair-un-Nisa Memon**  
Lecturer & Head of Family Child Development Department  
Govt. Dr.I.H.Zubari Girls College for Home Economics  
Hyderabad  
Member

11. **Mrs. Tahira Rana**  
Associate Professor  
Department of Family and Child Development  
Govt. College of Home Economics Gulberg,  
Main Baulevard,  
Lahore  
Member

12. **Ms. Nargis Irfan**  
Assistant Professor,  
Department of Family Relation and Child Economics  
Rana Liaqat Ali Khan College of Home Economics  
University of Karachi  
Karachi.  
Member

13. **Ms. Mussarat Anwar**  
College of Home Economics  
University of Peshawar  
Peshawar  
Member

14. **Prof. Dr. Nighat Bhatti**  
Chairperson,  
Department of Home Economics  
GC University Faisalabad  
Faisalabad  
Member
15. **Mrs. Mahjabeen**  
   Assistant Professor,  
   Department of Food & Nutrition  
   Govt. Dr.I.H. Zubari Girls College for Home Economics  
   Hyderabad  
   Member

16. **Mrs. Azra Amjad**  
   College of Home Economics  
   University of Peshawar  
   Peshawar  
   Member

17. **Ms. Uzma Khalid**  
   Lecturer,  
   Department of Home Economics  
   G.C University  
   Faisalabad  
   Member

18. **Dr. Naghmana Akhter**  
   Department of Food and Nutrition  
   Federal Govt College of Home Economics & Mgt Sciences  
   Islamabad  
   Member

19. **Ms. Hajra Ahmed**  
   Assistant Professor,  
   Department of Home & Health Sciences  
   Allama Iqbal Open University  
   Islamabad  
   Member

20. **Ms. Tayyiba Gul**  
   Assistant Professor,  
   Department of Home Economics  
   MirpurUniversity of Science & Technology  
   Mirpur, Azad Jammu & Kashmir  
   Member

21. **Mrs. Durdana Kazi**  
   Associate Professor  
   Department of Home Economics  
   Rana Liaqat Ali Khan College of Home Economics.  
   University of Karachi, Karachi  
   Member

22. **Mrs. Khadija Soomro**  
   Associate Professor,  
   Govt. Dr.I.H. Zubari Girls College for Home Economics  
   Hyderabad  
   Member
23. Mrs. Asma Kamal  
Lecturer,  
Department of Housing & Management  
Govt. College of Home Economics Gulberg,  
Main Baulevard,  
Lahore  
Member

24. Dr. Nomana Anjum  
Associate Professor,  
Department of Home & Health Sciences  
Allma Iqbal Open University  
Islamabad  
Member

25. Mrs. Shaheena Pervaiz  
Associate Professor,  
Department of Textile & Clothing  
College of Home Economics Gulberg,  
University of the Punjab  
Lahore  
Member

26. Ms. Roohi Iqbal  
Associate Professor  
Department of Clothing and Textile Merchandizing  
Rana Liaqat Ali Khan College of Home Economics  
University of Karachi  
Member

27. Mrs. Kouser Parveen  
Associate Professor,  
Govt. Dr. I.H. Zubari Girls College for Home Economics  
Hyderabad  
Member

28. Ms. Shehnaz Khattak  
Assistant Professor, Department of Clothing & Textile  
College of Home Economics,  
University of Peshawar  
Member

29. Ms. Samar Zaffar  
Associate Professor,  
Head of Department Textile and Clothing  
Federal Govt. College of Home Economics & Mgt Sciences  
G-7/2, Islamabad  
Member

30. Ms. Sara Asad  
Founder Member/Nutritionist  
PAHCHAAN (NGO)  
House no 09, Street 38, Canal Park, Gulberg-II,  
Lahore  
Member
31. **Ms. Hina Fauzia**  
   Assistant Manager (Curriculum)  
   Curriculum Section  
   TEVTA Secretariat,  
   96-H, Gulberg-II  
   Lahore  
   Member

32. **Ms. Rehana Siddiq**  
   194-T, Phase-II, Defense Housing Authority,  
   Lahore.  
   Member

33. **Mrs. Naheed Abbas**  
   Assistant Professor,  
   Department of Rural Home Economics  
   University of Agriculture  
   Faisalabad  
   Member

34. **Mrs. Attiya Inam**  
   Lecturer,  
   Government College of Home Economics,  
   Main Baulevard, Gulberg, Lahore  
   Member

35. **Ms. Saira Hayat**  
   Associate Professor,  
   Government College of Home Economics  
   Main Baulevard, Gulberg, Lahore  
   Member

36. **Ms. Seema Sharjeel**  
   Assistant Professor,  
   Government College of Home Economics  
   Main Baulevard, Gulberg  
   Lahore  
   Member

Mr. Muhammad Javed Khan, Adviser (Academics), HEC Islamabad welcomed the participants and briefed about the obligations of the Higher Education Commission for review, revision and development of curricula. He informed the participants that the objective of the meeting is to review/revise and develop 4-year BS curriculum in Home Economics following semester system of examination. He informed the members that Government is striving hard to enhance the quality of education in public/private sector Universities/Institutions by developing curriculum and making it more compatible with international standards, job oriented and in line with the needs of the society. Dr. M. Tahir Ali Shah, Deputy Director (Curriculum) was also present on the occasion.
Comments received on the draft curriculum from the expatriate Pakistani expert were circulated amongst the members of NCRC for consideration.

After three days long deliberations the NCRC finalized curriculum for 4-year BS in Home Economics. Salient features of revised curriculum are as follows:

1. The curriculum has been designed for the semester system of examination.

2. Applicants who have passed the HSc Home Economics or equivalent exam would be eligible to get admission in the four year BS programme. However at the discretion of the head of the institution admission may also be given (with or without the requirement of doing remedial courses) to those applicants who have passed intermediate or equivalent examination in subjects other than home economics.

3. The revised curriculum is designed to fulfill the requirements for four year BS Home Economics and is based on the “Standardized Format/Scheme of Studies For Four-Year Integrated Curricula For Bachelor Degree in Basic, Social, Natural And Applied Sciences” suggested by HEC.

4. The revised curriculum gives option for specializing in any one of the six areas of specialization for which courses are designed. It was decided that in line with international trends various institutions can offer specialization in one or more areas according to needs and feasibility.

5. It was decided that inspite of offering specialization in the home economics education must retain its focus on its core values and conform to International federation of home economics definition of home economics i.e. “Home Economics is a field of study and a profession that draws from a range of disciplines to achieve optimal and sustainable living for individuals, families and communities”.

6. The first two years include all the Compulsory and Foundation courses and some General courses. The entire Major and Elective Major, and some General courses are in the last two years. In the last two years studies are focused towards specific areas of specialization that leads to more focused training for relevant professions. Students can choose any one field from the five areas and would study all the major and selected elective major courses from the relevant area. All the students besides being trained to work as teachers and researchers in the relevant field are also trained for working in other relevant professions (examples given below).
<table>
<thead>
<tr>
<th>Areas of Specialization</th>
<th>Area Specific Relevant Professions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Art and Design</strong></td>
<td>Consumer products designer, colour Consultant, Art and design educators, Mural Designers, Calligraphists, Ceramists, Fine Artists, Sculptors, Graphic Artists, Art Educators, Art Specialists, etc.</td>
</tr>
<tr>
<td><strong>B. Food and Nutrition</strong></td>
<td>Dietitians, Public Health Nutritionists, Food Quality Control Manager</td>
</tr>
<tr>
<td><strong>C. Interior and Environmental Design</strong></td>
<td>Interior Designer, Environmental Design Educators and consultants</td>
</tr>
<tr>
<td><strong>D. Human Development and Family Studies</strong></td>
<td>Early Childhood Educator, Family Counselor, Special Education</td>
</tr>
<tr>
<td><strong>E. Resource and Facility Management</strong></td>
<td>Housekeeping Managers For Hotels, Hospital, Lodges; Events And Project Mangers, Program Mangers For Rural Support And Education Extension Programmes</td>
</tr>
<tr>
<td><strong>F. Textiles and Clothing</strong></td>
<td>Quality Control consultants for textiles and clothing, Designing And Merchandiser For Apparel And Textile Industry</td>
</tr>
</tbody>
</table>

IFHE Position statement:
www.ifhe.org/fileadmin/ifhe_administrator/Members/General/General_Information/consultation_draft.pdf

List of home economics research journals and website is given at the end.
<table>
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<th>Semester</th>
<th>Name of Subject</th>
<th>Credits</th>
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<td>First</td>
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<td>PAKISTAN STUDIES</td>
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<td>MATH/STAT-1</td>
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<tr>
<td></td>
<td>GENERAL-I Chemistry</td>
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<td></td>
<td>FOUNDATION-1 Introduction to Home Economics</td>
<td>2</td>
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<tr>
<td></td>
<td>FOUNDATION-2 Introduction to Arts &amp; Design I</td>
<td>2+1</td>
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<tr>
<td></td>
<td>FOUNDATION-3 Clothing &amp; consumer education</td>
<td>2+1</td>
</tr>
<tr>
<td>Second</td>
<td>ENGLISH-II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ISLAMIC STUDIES / ETHICS</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MATH/STAT-II / UNIV. OPTIONAL</td>
<td>3</td>
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<tr>
<td></td>
<td>GENERAL-II Physics</td>
<td>2</td>
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<td>GENERAL-III Psychology</td>
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<tr>
<td></td>
<td>FOUNDATION-4 Introduction to Arts &amp; Design II</td>
<td>2+1</td>
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<tr>
<td></td>
<td>FOUNDATION-5 Advanced clothing</td>
<td>2+1</td>
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<td><strong>Total CH semester 1-4</strong></td>
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<tr>
<td>Third</td>
<td>ENGLISH-III</td>
<td>3</td>
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<tr>
<td></td>
<td>INTRODUCTION TO COMPUTER</td>
<td>3</td>
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<td></td>
<td>GENERAL-IV Fundamentals of Economics</td>
<td>3</td>
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<tr>
<td></td>
<td>FOUNDATION-6 Life span development</td>
<td>2+1</td>
</tr>
<tr>
<td></td>
<td>FOUNDATION-7 Home Mgt &amp; housing 1</td>
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<td></td>
<td>FOUNDATION-8 Fundamentals of F&amp;N</td>
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<td><strong>Total CH semester 1-4</strong></td>
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<td>Fourth</td>
<td>ENGLISH-IV / UNIV. OPTIONAL</td>
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<tr>
<td></td>
<td>GENERAL-V Bio-Chemistry</td>
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<td></td>
<td>GENERAL-VI Sociology</td>
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<td></td>
<td>FOUNDATION-9 Family and community Development</td>
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<td></td>
<td>FOUNDATION-10 Home Mgt. &amp; housing 2</td>
<td>2+1</td>
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<tr>
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<td>FOUNDATION-11 Meal Mgt.</td>
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# ART AND DESIGN

## SCHEME OF STUDIES FOR SEMESTER 5-8

According to area of specialization

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<td>Fifth</td>
<td>FOUNDATION-11</td>
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<tr>
<td></td>
<td>Home Economics Education, Administration &amp; Supervision</td>
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<tr>
<td></td>
<td>MAJOR-I Applied Art-I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAJOR-II Art Education-I</td>
<td>3</td>
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<tr>
<td></td>
<td>MAJOR-III Essential of Interior Design-I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAJOR-IV Commercial Art</td>
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<td>Sixth</td>
<td>FOUNDATION-13 Methods of Research in Home Economics</td>
<td>3</td>
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<tr>
<td></td>
<td>MAJOR-V Applied Art-II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAJOR-VI Art Education-II</td>
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<tr>
<td></td>
<td>MAJOR-VII Essential of Interior Design-II</td>
<td>3</td>
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<td>MAJOR-VIII Islamic Art</td>
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<tr>
<td>Seventh</td>
<td>MAJOR-XI INTERNSHIP/Research Project</td>
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<td>MAJOR-X Art Appreciation-I</td>
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<tr>
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<td>MAJOR-XI Drawing and Painting</td>
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<tr>
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<td>ELECTIVE-I Interior Design/ The Craft of Hand Weaving /Graphic Communication-I</td>
<td>3</td>
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<td>ELECTIVE-II Hand Built Pottery /Textile Designing-I / Methods of Art Education</td>
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<td>Eight</td>
<td>MAJOR-XII RESEARCH Project</td>
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<td>MAJOR-XIII Art Appreciation-II</td>
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<td>MAJOR-XIV Painting and Print making</td>
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<td>ELECTIVE-III Weaving / Method of Art Education-II/ Interior Design-II</td>
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<td>ELECTIVE-IV Graphic Communication-II /Ceramics / Textile Design &amp; Printing/Internship</td>
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<td>Total credit hours</td>
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Total CH sm5-8: 62

Total CH sm1-8: 133
# B. FOOD AND NUTRITION

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<td>Fifth</td>
<td>FOUNDATION-11 Home Economics Education, Administration &amp; Supervision</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAJOR I Food Preservation</td>
<td>3</td>
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<tr>
<td></td>
<td>MAJOR-II Experimental Foods</td>
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<td>MAJOR-III Advanced Nutrition</td>
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<td></td>
<td>MAJOR-IV Dietetics</td>
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<td>Sixth</td>
<td>FOUNDATION-13 Methods of Research in Home Economics</td>
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<td>MAJOR V Physiological Aspects of Nutrition</td>
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<td>MAJOR-VI Nutritional Biochemistry 1</td>
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<td>MAJOR-VII Food Microbiology</td>
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<td>MAJOR-VIII Community Nutrition</td>
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<tr>
<td>Seventh</td>
<td>MAJOR-IX INTERNSHIP (hospital/community/institution)</td>
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<td>MAJOR-X Nutritional Biochemistry 2</td>
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<td>MAJOR-XI Food Technology</td>
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<td>ELECTIVE-Ia Institutional Management/ELECTIVE-Ib/ Food Analysis</td>
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<td>ELECTIVE-IIa Life Cycle Nutrition/ELECTIVE-11b Nutritional Management in Disasters</td>
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<td>MAJOR-XIV Nutrition Health &amp; Prevention</td>
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<td>ELECTIVE-III Sports Nutrition</td>
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<td>ELECTIVE-IV Food Allergies</td>
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## C. HUMAN DEVELOPMENT AND FAMILY STUDIES

<table>
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<td>FOUNDATION-11 Home Economics Education, Administration &amp; Supervision</td>
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<tr>
<td></td>
<td>MAJOR-I DEVELOPMENT FROM PRENATAL TO INFANCY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAJOR-II CHILDHOOD CARE AND DEVELOPMENT</td>
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<td>MAJOR-III Adolescent Development</td>
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<td>MAJOR-IV Adulthood and Aging</td>
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<td>MAJOR-V Positive Psychology</td>
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<td>MAJOR-VIII Early Childhood and Guidance</td>
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<td>MAJOR-X Theories of Human Development</td>
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<td>MAJOR-XI Communication in Human and Family Relations</td>
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<td>MAJOR-VI Abnormal Psychology</td>
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<td>MAJOR-IX Elementary Education and Administration</td>
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<td>ELECTIVE-I E-I Counseling and Guidance / Human and Family Ecology</td>
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<td>MAJOR-XIII Educational Psychology</td>
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<td>MAJOR-XVI Planning and Managing Human Services Programmes</td>
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<td>ELECTIVE-III Psychological Testing/Gerontology: Social Aspects</td>
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<td>ELECTIVE-IV Family Problems and Intervention Strategies/Day Care Management and Administration</td>
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<td>MAJOR I Interior Space Planning I</td>
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<td>MAJOR-II Fundamentals of Interior Architecture I</td>
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<td>MAJOR-III Designing the Furniture</td>
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<td>MAJOR-IV Interior Design Application ( perspective Drawing/Studio)</td>
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<td>MAJOR-VI Fundamentals of Interior Architecture II</td>
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<td>MAJOR-VII Designing For Soft Furnishing</td>
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<td>MAJOR-VIII Interior Environment( Physical Aspect)</td>
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<td>ELECTIVE-I Environmental Management</td>
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<td>ELECTIVE-II Designing Functional Spaces For Special Needs./Environmental Psychology</td>
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<td>MAJOR-XIII Advance Computer Applications for Interior Design.</td>
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<td>MAJOR-XIV Interior Design Project II</td>
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<td>ELECTIVE-III Interior Design Professional Practice Management</td>
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<td>MAJOR-I Essentials of Management</td>
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<td>MAJOR-III Mgt of household Affairs</td>
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<td>MAJOR-IV Fundamentals of Marketing</td>
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<td>MAJOR-XIV Human Resource Development</td>
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<td>MAJOR- II Pattern Making</td>
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<td>MAJOR-III Fashion Designing and Illustrations</td>
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<td>MAJOR-IV Textile Chemistry-I</td>
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<td>MAJOR-VII Textile Testing</td>
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<td>MAJOR-VIII Textiles Dyeing and Printing</td>
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<td>MAJOR-XI Experiential Textile</td>
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<td>ELECTIVE-I a) Textile and Clothing Industrial Management b) Decorative Fabrics</td>
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<td>ELECTIVE-II a) Entrepreneurship/b) Historic costume c) Economic, Social and Psychological Aspects of Clothing and Textiles</td>
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<td>MAJOR-XIII Applied Textile Designing</td>
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<td>MAJOR-XIV Dress Designing through Draping</td>
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<td>ELECTIVE-III a) Marketing and Merchandizing b) Structural Textile Designing c) Fashion Photography</td>
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<td>ELECTIVE-IV a) Fashion and Boutique Management b) Functional Designing For Special People</td>
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GENERAL COURSES FOR SEMESTER 1-4

Note: Syllabi of these general courses are given as these courses need to synchronize with other subjects of home economics and are taught by home economists specializing in Human development and family studies (G3 and G6) or Facility and resource management (G4)

BASIC PSYCHOLOGY (G3)

Credit Hours: 2 (2+0)
PREREQUISITES: Nil

Course Objectives:
- Emphasize the biological/physiological foundations of behaviour
- Demonstrate the many ways an understanding of psychological principles and concepts can be applied in daily living.
- To promote professional development of psychologists in the present era of health care, including the interface of psychology with managed care, in terms of consultation, programme development and service delivery.

Course Outline:
- Introduction to Psychology, Definition, fields of psychology, Methods of Psychology
- Perception, Sensation and Perception, Development of Perception, Principles of Perception
- Motivation, Meaning and nature of motivation.
- Emotions, Definitions, characteristics of emotions
- Theories of learning, what is learning? Classical conditioning, Operant conditioning, Cognitive learning
- Intelligence, Definitions, measuring intelligence
- Memory, Stages of memory, Short-term memory, Long-term memory.

Lab Outline:
- Nil

Reference Books:
4. Mahmud, J. (2004), Introduction to Psychology, Pak Book Corporation, Queens Road, Lahore.
FUNDAMENTALS OF ECONOMICS (G4)

Credit Hours 3 (3+0)
Prerequisites: Nil

Course Objectives:
- Creating awareness among individuals regarding financial management, Consumption
- Economics and individual’s role as a consumer in the development of a country.
- Students learn about the distinguishing characteristics and varied functions of banking
- Systems, Taxation and governing principles of Micro and Macro economics.

Course Outline:
- Definition of Economics
- Basic concepts of economics
- Micro economics Demand, Supply and Market
- Macro Economics Theory; Money banking and Taxation Consumer and the Market

Lab Outline:
- Nil

Reference Books:

SOCIOLOGY (G6)

Credit Hours: 2 (2+0)
Prerequisites:

Course Objectives:
- Understand and utilize basic principles and point of view of sociology which will allow students to gain insight into the behavior of people functioning in social groups
- Understand and better function within social institutions.
- Use foundational concepts to interpret their own lived experience
- Describe trends in ethnic, racial, religious, class, or gender changes
To apply the "sociological perspective" to their own lives and to the social environment of which they are a part.

Course Outline:
- INTRODUCTION: Meaning and definition, Nature of sociology as a specialized discipline, Scope and significance
- SOCIAL INTERACTION: Nature and Basic of interaction
- SOCIAL ORGANIZATION: social organization, Social groups, Social institutions, Community
- SOCIAL NORMS, SANCTIONS, AND SOCIAL CONTROL: Social sanctions, Social control, Deviance and conformity.
- MASS COMMUNICATION: Effect of mass communication, Globalization of mass media
- SOCIAL PROBLEMS IN PAKISTAN: Over population, Poverty and unemployment, Child Lahore and child abuse, Addiction and mental health

Lab Outline:
- Nil

Reference Books:
FOUNDATION COURSES FOR SEMESTER 1-4

INTRODUCTION TO HOME ECONOMICS (F1)

Credit Hours  3 (3+0)
Prerequisites: Nil

Course Outline:
- Nature of Home Economics, Aims and Objective of Home Economics
- History of Home Economics
- Home Economics in Pakistan
- Home Economics as a profession, Scope of Home Economics as a profession
- Method of teaching with special books recommended to Home Economics
- Lecture. ‘Demonstration’ Laboratory ‘field trips ‘Role playing’ Group Discussion.’
- Role and Responsibilities of Home Economist towards family, Community and Profession.

Lab Outline:
- Nil

Reference Books:

INTRODUCTION TO ART AND DESIGN-I (F2)

Credit Hours: 3 Semester 1
Pre-Requisites

Course Objectives:
- An understanding and application of art is important in developing and awareness about design.

Course Outline:
- Design
• Definition of Design
• The Designing process as a form of organization
• Factors involved in the making of a design
• The Analysis of the making of a design
• Elements of Design
• The Fundamental principles of Art
• Definition
• Application to interior, clothing and painting
• Appreciation of Art:
  • Cave Art
  • Indus valley Civilization

Lab Outline:
• Two practical Exercises based on all the Elements and Principles of design
• Preparation of portfolio

Reference Books:
3. Art of Calligraphy by David Harris (Jun 20, 2005), A Practical Guide to the Skills and Techniques, Dorling Kindersley.

CLOTHING AND CONSUMER EDUCATION (F3)

Credit Hours 3 (2+1) Semester 1
Prerequisites

Course Objectives:
• These courses is designed for students to identify textile fibres, learn the production and performance characteristics of natural and manmade fibres, understand the importance of fabric designing and finishes and learn yarn manufacturing and production techniques.
Course Outline:
- Introduction to Textiles and clothing
- Attributes essential for quality clothing
- Values, attitudes and behavior towards clothing, in the cultural milieu.
- Consumer Requirements:
  - Consumer rights and responsibilities, Consumer problems related to clothing, textiles and accessories (bed linen, towels).
  - Advertisements, different types of advertisements, advantages & disadvantages, Media of advertisement.
- Different kind of labels.
- Characteristics of three basic weaves
- Plain, twill and satin, comparative properties of knitted and woven fabrics.
- Methods for care and storage of clothing.
- Principles of storage such as cleanliness, neatness, orderliness and protection from wrinkling, dust, dampness & insects.
- Daily, weekly and seasonal care of clothes.

Lab Outline:
- Portfolio based on theory

Reference Books:

INTRODUCTION TO ART AND DESIGN-2 (F4)

Credit Hours: 4

Course Objectives:
An understanding and application of art is important in developing and awareness about design.
To create a better understanding about art and its evolution through Prehistoric art.

Course Outline:
- Types of Design
- Structural and Decorative
• Definition
• Requirements of a good structural design
• Requirements of a good decorative design
• Evaluation & Appreciation of Structural and Decorative design
• Character and Decorative Quality in design
• Structural and decorative designing interior/architecture, in Furniture and in dress
• Appreciation of Art:
  • Mesopotamian Art
  • Egyptian Art

Lab Outline:
• Study of Colour (Colour Wheel, Colour Schemes, Value intensity).
• Mediums : Poster paint and paper-cut
• Poster
• Theme Selection
• Design Development
• Lettering
• Execution of design paper cut and poster paints.
• Preparation of portfolio.

Reference Books:
ADVANCED CLOTHING (F5)

Credit Hours 3 (2+1) Semester 2

Course Objectives:
This course is designed to understand the principles of draping and application of draping on different types of figures. This subject will also enable students to comprehend the importance of basic bodice block, manipulation of darts & pleats. Facilitate students to understand the importance of dress forms.

Course Outline:
- Principles of pattern making; Pattern adoption for different types of figure. Standardization of sizes
- Flat pattern design:
- Methods of controlling fullness in bodice darts, tucks, pleats and gathers.
- Creating styles through dart manipulation
  (a) Pivot method (b) slash and spread method.
- Different styles of yokes, sleeves, collars and bodice sleeve combinations.
- Principles of fitting (Ease, Grain, Line, Balance, Set).
- Current fashion trends in dress.

Lab Outline:
- Construction of formal dress
- Construction of a garment cut on bias.
- Construction of Blouse and Petticoat/skirt/trouser.
- portfolio

Reference Books:
5. The Encyclopedia of Sewing Techniques.
HUMAN DEVELOPMENT (F6)

Credit Hours: 3 Semester 3

Course Objectives:
To improve the quality of life by discovering, integrating, applying and discriminating knowledge about life span of human development, relationships families and communities
- Understand the complexity of individual development across the lifespan in diverse context and in changing environment.

Course Outline:
- Development: Definition and Aspects of Development
- Principles of growth and development
- Stages and Developmental tasks across the life span
- Infancy
- Childhood
- Adolescence
- Adulthood
- Aging
- Hazards in relation to life stages
- Adjustments across the life Span

Lab Outline:
Not Applicable

Reference Books:

HOME MANAGEMENT (F7)

Credit Hours: 3 (2+1) Semester 3

PREREQUISITES:

Course Objectives
- To develop understanding of issues relevant to home management and enhance skills for managing house and homes.

Course Outline:
• Management; Definition of Management; Management Process; Motivations for Management
• Decision Making; Importance; Relationship to Home Management
• Family Life Cycle, Size and Composition
• Resources; Definition, Types; Scarcity and Inter-Relationship of Resources; Management of Specific Resources
• Management of Income; Types of Income; Saving Importance and Methods
• Management of Time And Energy; Concept of Management Applied to Time and Energy; Guides to Time Management and Time Planning; Ways of Controlling Energy and Fatigue; Work Simplification in Relation to Making Task
• Kitchen and Storage; Type of Kitchen; Principle of Storage; Importance of Functional Storage

Lab Outline:
• Designing an ideal house plan on given area.
• Making time and activity plan for oneself.
• Make money budget for a group of five of six members of Low Income and Middle Income Families.

Reference Books:

FUNDAMENTALS OF FOOD & NUTRITION (F8)

Credit Hours: 3 (2+1) Semester 3

Course Objectives:
• To develop an understanding of basic terms in nutrition.
• To understand the role of various nutrients and their importance in planning and preparing balanced diet.

Course Outline:
• Introduction to Nutrition; definition of food; nutrition and relevant terms: health, nutrients, nutritional status, and malnutrition.
• Functions of foods: physiological, psychological and social.
• Signs of good and poor nutrition.
• Classification, characteristics, food sources, functions and nutritional problems of the Macronutrients and Micronutrients.
• Balanced Diet: definition and characteristic of balanced diet; importance of balanced diet in relation to health.
• Use of daily food guide (Food Groups and Food Guide Pyramid), food composition tables and Dietary Reference Intakes (DRI).
• Conservation of nutrients and losses in food storage, preparation and cooking methods of food groups.
• Factors effecting dietary practice; food habits; food choices; food fads and fallacies.

Lab Outline:
• Learning of laboratory skills, abbreviations and symbols of terms used in measuring and weighing various foods.
• Effect of preparation and cooking on colour, texture and palatability of different food groups
• Milk, egg, meat, vegetable, cereal cookery:
• Snacks and beverages.
• Maintenance of practical record book

Reference Books:

FAMILY AND COMMUNITY DEVELOPMENT (F9)

Credit Hours: 3 Semester 4

PREREQUISITES:

Course Objectives:
• To understand the individual and family development dynamics within families, and interaction between the families and larger social context.
• To gain the thorough understanding of community development combined with the practical skills necessary to work effectively in development work.

Course Outline:
• Sociology of The Family and community: Family and community as social institutions, Review of latest research in this field.
• The Family: Functions and types of family, Change in family institution
• Introduction To Community: Meaning, definition and explanation of community, Functions and Types of communities in urban/rural areas, social change
• Community Development: Meaning and principles and Methods of community development

Lab Outline:
• Minor project of community development (to be carried out in the immediate community).
• Major project of community development (to be carried out in coordination with government and non-government organization).
• A detailed written report of the above projects.

Reference Books:

HOME MANAGEMENT & HOUSING-2 (F10)

Credit Hours 3 (2+1) Semester 4

PREREQUISITES:

Course Objectives:
Course Outline:
• Definition and importance of housing. Review of housing needs. (basic human needs);
• Review of housing conditions in Pakistan in urban and rural areas.
• Planning of the house; Primary considerations; Principle of the house planning.
• Major elements of interior design structure:--; Floors and floors covering; Walls and walls finishing; Ceiling and ceiling finishing; Doors & Windows.
• Home furnishings, utensils, equipments and electrical appliances:-
• Selection, care and arrangement of furniture, furnishing and accessories
• Selection care and maintenance of utensils, equipments and electrical appliances.

Lab Outline:
• Living in home Management residence house for 2-3 weeks or
• Experiment With One Work Simplification Project
• Evaluate some major electrical appliances being used in Pakistan homes in relation to care, design, function use and efficiency.

Reference Books:

MEAL MANAGEMENT (F11)

Credit Hours: 3 (2-1) Semester 4

Course Objectives:
• To develop skills to plan appropriate meals matching the nutritional needs of the family using available resources.
• To develop an understanding of market condition and important factors in selection of various food products.
• To create awareness about selection, care and use of table appointments in different table settings and service of meals.

Course Outline:
• Importance and principles of meal planning for family and occasions.
• Selection of various foods in relation to season and market conditions.
• Selection, use and care of table appointments.
• Study of different types of table settings, table manners and etiquettes.

Lab Outline:
• Keeping a record of market prices (retail & wholesale)
• Comparison of weight, volume and effect of cooking on colour, taste and texture of different foods.
• Planning, preparation and service of meals for different occasions at different income levels.
• Market visits for cost and quality and enforcement of food marketing regulations.

Reference Books:

COURSES OF SEMESTER 5-8

A: Foundation Courses (to be taken for all the students)

ADMINISTRATION AND SUPERVISION OF HOME ECONOMICS EDUCATION (F12)

PREREQUISITES: (F1)

Course Outline:
• Administration: Administrative process, Decision making, Planning, coordinating, Influencing evaluation, Roles and Responsibilities of college administration staff selection, Organizing work planning revision of curriculum, defining lines of authority, directing educational survey and studies. Encouraging profession growth, working effectively with non-academic staff.
• Human Relation: Significance of human relation in school administration, Communicational skills, Leadership, Techniques of effective contact and professional growth, Relationship of teachers to parents and the community in the school programme.
• Supervision: Concepts and nature of supervision, Aims and objectives of supervision, Bases of needs for supervision (social, psychological, professional
• Philosophical etc); Major functions of supervision (co ordination, Leadership, professional growth etc)Planning according to the nature of the program, Knowledge of students, Staff and community, Pedagogical skills. Evaluation of supervision, Major purposes of evaluation of supervision, Basic principles in evaluation of supervision, Types of evaluation in supervision.
Organization Of Department Of Home Economics: Planning and equipping the building of all department, Managing the budget, Handling problems of purchasing, inventory and maintenance organizing and managing the Home Economics office Planning guidance services for the welfare of all students.

Lab Outline:
Nil

Reference Books:
4. Neagley and Evans. Handbook of effective supervision in instruction prentice Hall Inc. NJ USA

RESEARCH METHODS IN HOME ECONOMICS (F13)

Credit Hours  3 (3+0)

PREREQUISITES: Nil

Course Outline:
- The nature of Research; Basic and Applied Research; Functions of Research.
- Types of Research; Historical and documentary; Experimental; Descriptive
- Planning the Research Project; Purposes of Scientific research in Home Economics; Purpose of specific research studies; Selection of the problem; Formulating and testing Hypothesis.
- Techniques and Tools of Data Collection; Observation; Interview; Questionnaire; Other Techniques; Organization of personal
- Research agencies Conducting Research in Pakistan
- Research in Home Economics
- Writing the Research project; General rules for writing, format and style; Revising and rewriting the project; Thesis in Research

Lab Outline:
Nil
Reference Books:

B: MAJOR & ELECTIVE COURSES TO BE TAKEN ACCORDING TO AREA OF SPECIALISATION

1: MAJOR & ELECTIVE COURSES FOR ART AND DESIGN

APPLIED ART - I (M1-AD)

Credit Hours: 3 (Semester 5/Year 3)

Course Objectives:
- To develop in the students an aesthetic sense so as to be able to evaluate the various aspects of design in a better manner.
- It also helps to promote an appreciation of art and facilitate students to refine their creative ability and expressions through designing.
- To strengthen the understanding of art and its movements in various civilization.

Course Outline:
- Meaning and application of aesthetics
- Appreciation of ancient art:
  - Greek
  - Gandhara
  - Crafts of Pakistan

Lab Outline:
- Development of design
- Produce design for textiles, tiles and borders
- Preparation of portfolio of the above

Reference Books:
ART EDUCATION - 1 (M2-AD)

Credit Hours: 3 (Semester 5/Year 3)

Course Objectives:
- This course is designed for students to develop teaching skills based on the philosophy of Art Education.
- This course will enable students to learn to prepare lesson plans in art subjects for school age children in view of their abilities.

Course Outline:
- Philosophy of art
- The meaning of Art Education
- Free expression in art or play
- Personality Development
- Assimilation and Projection
- The importance of creativity and its prospects in education.
- Importance of Art for creativity

Lab Outline:
- Students to observe and evaluate the art work of school age children.
- As a student teacher, observe the art work of students at schools. Assess the suitability of art techniques, processes, media and material usage by children.

Reference Books:

ESSENTIALS OF INTERIOR DESIGN – I (M3-AD)

Credit Hours: 3 (Semester 5/Year 3)

Course Objectives:
- This course is designed to provide essential decorating skills in order to succeed as an interior decorator. Strong emphasis is placed on the use of elements and principles of design in interior décor.

Course Outline:
- Elements and principles of art and relation to interior design.
- Principles of House Planning
- Size and Shape: Topography
- Landscaping and Orientation
- Types of Houses
- Single Storey; Double Storey, Split Level House
- Housing Types: Row Houses, Town Houses, Semi detached Houses, Single family detached houses.
- Planning of House
- Storage Space
- Circulation and Ventilation

Lab Outline:
- Applications of elements and principles of design in the interior planning of living space in different shapes and sizes:
  - Bedroom
  - Drawing Room/Living Room
  - Dining Room
  - Kitchen
• Preparation of portfolio (5 floor plans on graph paper)

Reference Books:
4. Whiton Sherrill; Elements of Interior Design and Decoration (paperback 2010) Published by J. B. Lippincott Comp. New York.

COMMERCIAL ART (M4-AD)

Credit Hours: 3 (Semester 5/Year 3)

Course Objectives:
- This course will enable students to create images to make products and publications unique and attractive. Students will develop skills and techniques by working on project based assignments allowing them to develop extensive portfolios and gain work related experience.

Course Outline:
- Introduction to graphic design
- Introduction to typography
- Text, colour and display typographies
- Designing of logo, letterhead, greeting cards, posters, book covers, illustration and advertisement.

Lab Outline:
- Preparation of portfolio constituting designing of logo, letterhead, greeting cards, poster, signs and exhibits using assorted typography medium.

Reference Books:

**APPLIED ART - 2 (M5-AD)**

Credit Hours: 3 (Semester 6/Year 3)

Course Objectives:
- This course focus on contemporary, figurative and objective drawing and painting using both classical and modernist aesthetics. To increase understanding about art its movements through various civilization.

Course Outline:
- Appreciation of art:
  - Roman
  - Early Christian
  - Byzantine

Lab Outline:
- Introduction to contemporary, figurative and objective drawings
- Preparation of portfolio

Reference Books:

**ART EDUCATION - 2 (M6-AD)**

Credit Hours: 3 (Semester 6/ Year 3)

Course Objectives:
- This course is designed to gain teaching skills based on the philosophy of Art Education. This course will enable students to design lesson plans for art subject in view of children needs and abilities.

Course Outline:
- Art in education& its importance
- Meaning of integration in art education
- Teaching methods in Art
• The Teachers role in the art class room
• The developmental stages in art education for children
• The beginning of self expression scribbling stage 7-9 years
• The pre-schematic stage: 4-7 Years;
• The achievement of a form concept in schematic stage 7-9 years
• The age of dawning realism the gang age 9-12 years
• The age of reasoning the pseudo naturalistic stage 12-14 years
• The period of decision: 13 years and onwards.

Lab Outline:
• Lesson plans to be prepared by every student for art subject. The students will deliver these lessons in public school settings at elementary, primary and secondary and high school levels. Students will submit their lesson plans in portfolio.

Reference Books:
ESSENTIALS OF INTERIOR DESIGN - 2 (M7-AD)

Credit Hours: 3 (Semester 6/Year 3)

Course Objectives:
- This course is designed to provide comprehensive decorating skills to succeed as an interior decorator. Strong emphasis is placed on the use of elements and principles of design in interior décor.

Course Outline:
- Planning and designing of interior elements
- Walls and Fireplaces, construction materials and finishes
- Windows and doors
- Types, designs and location and treatments
- Floors and Ceilings
- Types, designs and location and treatments
- Accessories
- Wall pictures, home furnishings and flower arrangements

Lab Outline:
- Applications of elements and principles of design in the interior planning of:
  - Master bedroom
  - Nursery bedroom
  - Teenager’s bedroom
  - Preparation of portfolio (5 floor plans)

Reference Books:

ISLAMIC ART (M 8-AD)

Credit Hours: 3 (Semester 6/Year 3)

Course Objectives:
- The course is designed to teach Islamic art and culture and increase its appreciation among students.

Course Outline:
- Islamic Art
- Ummayads
- Abbasids
- Islamic Art in Persia
- Ilkhanids
- Taimurids
- Muslim Art in the Sub Continent
- Mughal
- Contemporary Art in Pakistan
- Islamic Calligraphy
- Development of Islamic Calligraphy
- Origins of Arabic Script
- Cursive and Angular Script Styles
- Contributions of Ibn-e-Muqla & Ibn-e-Bawwab
- Calligraphy in Pakistan.

Lab Outline:
- Preparation of portfolio of calligraphic work.

Reference Books:
- Islamic Art and Architecture: From Isfahan To The Taj Mahal; Thames & Hudson (04/11/2002).
- Rice David Talbot; Islamic Art (Jan, 1975). The Yale University Press.
ART APPRECIATION - I (M10-AD)

Credit Hours: 3 (Semester 7/Year 4)

Course Objectives:
- This course is designed to educate students to analyze a work of art and be able to place it in historical context. To understand that the work of art are the products of a creative, intelligent and skillful human beings who were nurtured in a specific historical and cultural milieu, hence to know enough about art periods, to recognize specific styles to make an informed aesthetic judgments.

Course Outline:
- Early Medieval
- Romanesque art
- Gothic
- Renaissance

Lab Outline:
N/A

Reference Books:
1. Janson’s History of Art: The Western Tradition (8th Edition) (MyArtsLab Series) by Penelope J.E.

DRAWING & PAINTING (M11-AD)

Credit Hours: 3 (Semester 7/Year 4)

Course Objectives:
- Focus of this course is to enhance the creativity of students in the area of drawing and painting with different mediums.
- Further, this course focuses on printing using assorted material, media and surface.

Course Outline:
- Painting
- Introduction to drawing and painting still life, landscape, figure drawing using following mediums:
  - Charcoal, pastels, pen & ink, water colour and gouche.
Lab Outline:
- Prepare portfolio of art work.

Reference Books:
2. Camp Jeffery and Hockney David; Draw: How to Master the Art (Mar 15, 1994).

THE CRAFT OF HAND WEAVING (Ela-AD)

Credit Hours: 3 (Semester 7/Year 4)

Course Objectives:
- This course is designed to teach history of weaving. Various weaving techniques taught as a craft will help to keep this craft alive and developing.

Course Outline:
- History of weaving:
  - The great centers in Italy: 13th century
  - Renaissance (Lucca, Florence, France, Venice)
  - The Baroque and Rococo in France
- Types of Hand Looms
- Primitive loom
- Draw loom
- Horizontal Loom
- Types of weaves
- Plain weave
- T will weave
- Over short weave
- Combination weaves
- Tapestry and its designing

Lab Outline:
- Preparation of portfolio (one art piece of size 8”x10” or 10”to 12”) One tapestry designed and woven
Reference Books:

INTERIOR DESIGN-I (Ela-AD)

Credit Hours: 3 (Semester 7/Year 4)

Course Objectives:
- This course is designed to teach students to enhance the quality and function of interior spaces, responding to all of the needs of human beings leading to the improvement in the quality of life.

Course Outline:
- Study of 17th and 18th century's with a focus on interior designing.
- Introduction to perspective drawing
- One point, two points and three points perspective drawings
- Planning of Interiors:
- Walls and their treatments including windows, doors and fire places.
- Colour and Colour schemes of interiors
- Light fixtures
- Drapery and upholstery
- Furniture.

Lab Outline:
- Preparation of portfolio (5 pieces of art work on perspective drawing)

Reference Books:

GRAPHIC COMMUNICATION I (Ela-AD)

Credit Hours: 3 (Semester 7/ Year 4)

Course Objectives:
- This course is designed to provide a broad overview of the graphic communication process from creative planning stage, through graphic design, to the conversion of original art work into printing production plates.

Course Outline:
- The fundamental elements of typographic design
- Concepts, Ideas and making of images
- Colour and communication
- Introduction to photography in graphic design
- Software’s used for Graphic Communication
- Designing Promotional Graphics

Lab Outline:
- Preparation of portfolio (5 pieces of art work)
- Use of software for graphic communication:
  - Corel-Draw
  - Designing Promotional Graphic (Publicity Design)

References Books:
HAND BUILT POTTERY (E2a-AD)

Credit Hours: 3 (Semester 7/ Year 4)

Course Objectives:
- This course is designed to learn about the traditional techniques of pottery making such as hand-building, wheel, slip casting, glazing and firing.

Course Outline:
- Types of Clay:
- Methods of preparing Clay
- Techniques of Decorations
- Techniques of Glazing
- Basic Firing Techniques to turn Clay into Ceramics

Lab Outline:
- Make a pottery piece

Reference Books:
1. Mills Mavreen; “Surface Design for Ceramics”. Publisher Lark Books (July 1. 2008) 144 pgs.
8. Rahaman M. N.; Ceramics Processing... Publisher: CRC/ Taylor & Francis, 2007. pg 473.

TEXTILE DESIGNING & PRINTING METHODS-I (E2a-AD)

Credit Hours: 3 (Semester 7/ Year 4)

Course Objectives:
- This course is designed to educate students about the history of printing in different regions. In this class, students will learn various textile designing and printing techniques.

Course Outline:
- History of Printing
- Textile design
- Design Inspirations; Types of Design; The Croquis; Repeat; The Importance of Colour
- Techniques and media of textile decoration
- Fabric treatment prior to printing
- Block printing
- Tie and dye
- Batik

Lab Outline:
- Develop computer aided design of block printing, tie and dye, and batik and replicate one of these on a fabric.

Reference Books:
1. Fish June; Designing & Printing Textiles: Publisher Crowood Press (July 1, 2005) 160 pgs.
6. Pettit Florence Harvey; Block Printing on Fabric, Published by Hastings House 1952 but digitized on 15 Nov, 2007.
METHODS OF ART EDUCATION-I (E2a-AD)

Credit Hours: 3 (Semester 7/ Year 4)

Course Objectives:
- This course aims to develop students as art teachers and art education researchers. It prepares students to develop and teach art to children

Course Outline:
- Designing and developing an art programme
- Key factors in planning the art programme
- Focus on developing creativity and aesthetic sense
- Creativity and the Art Teacher
- Program for Aesthetic Development
- Culture and Aesthetic Awareness

Lab Outline:
- Develop lesson plans for secondary class children and teach them as a student teacher.

Reference Books:
4. Hurwitz, AL; Day Micheal; Children and their Art: Methods for elementary Schools 8th Ed. Published by Cengage Learning 2006

ART APPRECIATION - 2 (M13-AD)

Credit Hours: 3 (Semester 8/ Year 4)

Course Objectives:
- This course focuses on the artistic achievement of previous ages and its relationship to society and culture. The architecture, sculpture and painting produced by a civilization provide an important key to the understanding of that civilization's role in art history.

Course Outline:
- The Renaissance
- Baroque
- Rococo
- Modern Art

Lab Outline:
- Choose a piece of art and present a report on it (1000 words).

Reference Books:
1. Janson’s History of Art: The Western Tradition (8th Edition) (MyArtsLab Series) by Penelope J.E.

PAINTING & PRINT MAKING (M14-AD)

Credit Hours: 3 (Semester 8/ Year 4)

Course Objectives:
Focus of this course is to enhance the creativity of students in the area of drawing and painting with different mediums.
- Further, this course focuses on printing using assorted material, media and surface.

Course Outline:
- Painting in Acrylic and oils
- Still Life, Landscape, Figure, using the given media,
- Printing
- Wood Cut
- Other Creative printing Techniques

Lab Outline:
- Prepare portfolio of art work

Reference Books:
2. Camp Jeffery and Hockney David; Draw: How to Master the Art (Mar 15, 1994).
3. A quantum Book. The Great Masters. 2004 Quantum Publishing Ltd. 6 Blunded Street London, N 7 9 BH.
METHODS OF ART EDUCATION-2 (E3-AD)

Credit Hours: 3 (Semester 8/ Year 4)

Course Objectives
- This course aims to develop students as art teachers and art education researchers. It prepares students to develop and teach art subject to children including children with special needs and gifted children.

Course Outline:
- Identifying children with special needs
- Identifying gifted children
- Designing the art curriculum
- Key factors in planning the art program
- Role of the teacher for gifted and children with special needs
- Focus on developing creativity and aesthetic sense
- Expression of ideas and sentiments through art work

Lab Outline:
- Develop lesson plans for secondary class children and teach them as a student teacher.

Reference Books:

INTERIOR DESIGN-2 (E3-AD)

Credit Hours: 3 (Semester 8/ Year 4)

Course Objectives:
- This course is designed to teach students to enhance the quality and function of interior spaces, responding to all of the needs of human beings leading to the improvement in the quality of life.
Course Outline:
- Study of 19th and 20th century's with a focus on interior designing,
- Historic Modification and Adaptation of Modern Movement
- Raj Period and Pakistan today
- Planning of Interiors:
- Walls and their treatments including windows, doors and fire places
- Colour and Colour schemes of interiors
- Light fixtures
- Drapery and upholstery
- Furniture

Lab Outline:
- Preparation of portfolio of art work on perspective drawing

Reference Books:

WEAVING (E3-AD)

Credit Hours: 3 (Semester 8/ Year 4)

Course Objectives:
- This course is designed to teach history of weaving. Various weaving techniques taught as a craft will help to keep this craft alive and developing.

Course Outline:
- History of weaving:
- English – 17th and 18th Century
- American Weaves and Patterns
- Indo-Pakistan 2500 B.C. 20th Century
- Types of Looms:
  - Jacquard loom
  - Power loom
  - Computerized loom
• Lace weave
• Non loom Processes

**Lab Outline:**
• Preparation of portfolio (one art piece of size 8”x10” or 10”to 12”)
  One tapestry designed and woven

**Reference Books:**

**GRAPHIC COMMUNICATION-2 (E4-AD)**

**Credit Hours:** 3 (Semester 8/ Year 4)

**Course Objectives:**
• This course is designed to provide a broad overview of the graphic communication process from creative planning stage, through graphic design, to the conversion of original art work into printing production plates.

**Course Outline:**
• Corporate design, Visual, Expression Identity
• Promotional graphics, Design Concepts for promotional literature (Publicity Design)
• Editorial design/information design, Creative synthesis of text and images
• Critical studies, Historical analysis of visual culture
• Software’s used for graphic Communication:

**Lab Outline:**
• Preparation of portfolio (5 pieces of art work)
• Use of software for graphic communication:
• Corel-Draw
• Designing Promotional Graphic (Publicity Design)
References Books:

CERAMICS (E4-AD)

Credit Hours: 3 (Semester 8/ Year 4)

Course Objectives:
- To enable the students to teach the various Ceramic Techniques and use them in a creative and professional manner

Course Outline:
- History of Pottery and Ceramics
- Early Islamic Pottery
- Pottery in Mesopotamia, Egypt and Persia
- Contemporary Ceramic of Pakistan
- Methods of preparations
- Alternative methods
- Mold Making
- Slip Casting

Lab Outline:
- Make a pottery piece

Reference Books:

TEXTILE DESIGNING & PRINTING METHODS-2 (E4-AD)

Credit Hours: 3 (Semester 8/ Year 4)

Course Objectives:
- This course is designed to educate students about the history of printing in different regions. In this class, students will learn various textile designing and printing techniques.

Course Outline:
- Industrial printing processes
- Textile marketing
- Computer aided design
- Techniques and media of textile decoration
- Fabric treatment prior to printing
- Silk Screen; Mix Media; Hand Painting; Dye and dyestuff; treatment of fabric

Lab Outline:
- Develop computer aided design of block printing, tie and dye, and batik and replicate one of these on a fabric.

Reference Books:
1. Fish June; Designing & Printing Textiles: Publisher Crowood Press (July 1, 2005) 160 pgs.
EXPERIMENTAL FOODS (M2- FN)

Credit Hours: 3 (2-1) Semester 5

Course Objectives:
- To apply scientific principles in the study of food products
- To understand the functional properties of food in various aspects of cookery.
- To understand the effects of variables on final food product.
- To practice the methods of food evaluation.

Course Outline:
- Introduction to the Experimental Study of Food Science
- Experimental approach to food science; definition and importance of food science; importance of research studies; selection of a problem; selection of the judges, presentation of food sample for evaluation, methods of food evaluation.
- Structure, characteristics and uses of food and food products:
  - Egg Cookery
  - Fats and Oils
  - Sugar Cookery and crystallization
  - Milk Cookery
  - Meat Cookery
  - Starch Cookery
  - Vegetables and Fruits.

Lab Outline:
- Practice of Subjective and Objective methods of food evaluation
- Effect of different variables on food products
- Time and Temperature
- Amount of mixing
- Food preparation methods
- Tenderizers
- Different Fats and Oils
- Leavening agents
- Report writing.

Reference Books:
ADVANCED NUTRITION (M3- FN)

Credit Hours: 3 (2-1) Semester 5

Course Objectives:
- To develop advanced understanding of the role of nutrients in prevention of malnutrition.
- To study the process of digestion, absorption and metabolism.
- To understand the significance of nutrition in life cycle.

Course Outline:
- Advance study of macronutrients, micronutrients and water.
- Digestion, absorption, and metabolism of various nutrients and their interaction.
- Nutrition in life cycle: Pre and post natal; infancy, adolescence, elderly.
- Methods of assessment of Nutritional Status
- A brief study of current food related health issues, organic foods and eating disorders.

Lab Outline:
- Planning and delivery of nutrition education on nutritional problems of Pakistan
- Assessment of nutritional status Anthropometry, Biochemical, Clinical and Dietary and comparison with standards
- Calculation of energy and protein requirement for self and for the family
- Practical note book.

Reference Books:
   Macronutrients, micronutrients and Metabolism. CRC Press. Taylor and 
   Francis Group. Boca. Raton FL, USA.
   Saunders Co.
   Millin Publishing Co.
DIETETICS (M15-FN)

Credit Hours: 3 (2-1) Semester 5

Course Objectives:
- To understand the importance of diet therapy.
- To develop skills in planning and preparation of therapeutic diets using the food guides
- Education and counseling of patients and families.

Course Outline:
- Introduction to Diet Therapy, Nutrition care Process and Modified Diets
- Use of Exchange lists in Diet Therapy.
- Dietary modification for texture, energy, nutrients and fluid
- Dietary modifications for Acute and Chronic Diseases
- Febrile Conditions
- Gastrointestinal Tract
- Surgical Conditions
- Diabetes Mellitus
- Cardiovascular diseases
- Renal Diseases
- Introduction to feeding routes (Enteral and Parenteral Feeding).

Lab Outline:
- Planning of diets for various Chronic and acute Conditions
- Practical file

Reference Books:
PHYSIOLOGICAL ASPECTS OF NUTRITION (M5- FN)

Credit Hours: 3 (2-1) Semester 6

Course Objectives:
- To study the physiological approach to nutrition.

Course Outline:
- Cell physiology
- Composition of the body
- Enzymes
- Digestion and absorption
- Nutrient exchange and homeostatic control
- Blood and circulatory system
- Hormones
- Inborn Errors of metabolism.

Lab Outline:
- Blood and Urine Analysis

Reference Books:

NUTRITIONAL BIOCHEMISTRY – 1 (M6- FN)

Credit Hours: 3 (3-0) Semester 6

Course Objectives:
- To study the biochemical aspects of nutrients, their digestion, absorption, metabolism and inter relationship.

Course Outline:
- Introduction to Energy units
- Caloriemetry
- Measurement for energy production & expenditure.
- Energy requirements, balance and regulation
- Biochemical aspects of Macro- nutrients
Lab Outline:

- None

Reference Books:


FOOD MICROBIOLOGY (M7- FN)

Credit Hours: 3 (2-1) Semester 6

Course Objectives:

- To understand importance of food safety and the role of food microbiology in the prevention of food spoilage.

Course Outline:

- Introduction to Food Microbiology
- Classification of microorganism important in food
- Morphological. Biochemical and physiological characteristics of Microorganisms
- Water microbiology
- Milk microbiology
- General Principles of microbiological activity

Lab Outline:

- Study of micro-organism under microscope.
- Dilution Techniques, Plating techniques, Manufacture of various microbiological oriented food products. Examination of foods for spoilage.

Reference Books:

2. Butts R. An introduction to the biology of Micro Organisms Edward Arnold Publisher.
COMMUNITY NUTRITION (M 8- FN)

Credit Hours: 3 (2-1) Semester 6

Course Objectives:

- To understand local nutritional problems, their prevalence in vulnerable groups.
- To enable the planning of nutrition education programme for institutions and community to prevent nutritional disorders.
- To assess the food and nutrition scenario at national and international level.

Course Outline:

- Prevalence and prevention of premarry nutritional problems of Pakistan: Protein energy malnutrition; Rickets and Osteomalacia; Scurvy; Beri-Beri; Xerophthalmia and Keratomalacia; Pellagra; Nutritional Anaemias, Iodine Deficiency Disorders and Zinc deficiency.
- Nutrition Education and counseling process
- Role of Home Economist in Community development.
- Role of national and international agencies in the field of health & nutrition.

Lab Outline:

- Field work and report

Reference Books:

NUTRITIONAL BIOCHEMISTRY- 2 (M9- FN)

Credit Hours: 3 (2-1) Semester 7

Course Objectives:
- To study the biochemical aspects of nutrients, their digestion, absorption, metabolism and inter relationship.

Course Outline:
- Digestion, absorption, metabolism of macronutrient
- Biochemical aspects of micronutrients
- Absorption and metabolism of micronutrients

Lab Outline:
- Research project report based on Nutrient Analysis.

Reference Books:

FOOD TECHNOLOGY (M10- FN)

Credit Hours: 3 (2-1) Semester 7

Course Objectives:
- To understand the concept of food technology and its scope.
- To develop an understanding of food products, their composition and processing techniques.

Course Outline:
- Introduction and Scope of Food Technology
- Composition of food and effect of processing techniques
- Cereal technology
- Meat, poultry and fish technology
- Fruits & vegetable technology
- Dairy technology
- Fat and oil technology
- Sugar and confectionary technology
Lab Outline:

- Report based on Visit to any Food Industry

Reference Books:

INSTITUTIONAL MANAGEMENT (Ela-FN)

Credit Hours: 3 (2-1) Semester 7

Course Objectives:
- To learn the management and institutional principles implemented by organizations offering food services.
- To practice menu planning for different occasions and institutions/organizations.

Course Outline:
- Meal planning in Institutions and menu planning for different income levels
- Types and organization of food services
- Organization of Food Services:
  - Management of canteens, hostels, hospitals, nursery schools, homes with paying guests and other establishments.

Lab Outline:
- Practice in Menu Planning: Menus for three days may be planned for a hospital, canteen, nursery school and hostel. Nutritive value of menu and price should be worked out for each case.

Developing standardized quantity recipes:
- Common recipes of meat.
- Common recipes of vegetables. (Fresh vegetable pulses and legumes)
- Common cereal recipes.
- Common desserts.
Field trips:
- Four to six trips to different types of institutions. (Report on trip will be recorded in the file)
- Offices and Government hostels.
- College/School hostels.
- Bakeries.
- Hospitals
- College, University and other Cafeterias etc.

Reference Books:

FOOD ANALYSIS (Elb-FN)

Credit Hours: 3(2-1) Semester 7

Course Objectives:
- To study the importance and methods of food analysis

Course Outline:
- Introduction and importance of food analysis
- Characteristics of Food quality
- International Food laws and standards
- Implementation of food laws in Pakistan
- Sample preparation (Methods of sample preparation)
- Chemo-metrics :Tools, procedures and validation
- Optical Properties of Food :Measurements and instruments for color detection
- Principles and techniques of proximate analysis: Moisture, crude proteins, fat extraction, ash, crude fibre.
- Spectrometry

Lab Outline:
- Preparation of samples for food analysis. Determination of crude nutrients in food samples by proximate analysis technique. Detection of adulteration in foods.
NUTRITIONAL MANAGEMENT IN DISASTERS (E2b-FN)

Credit Hours: 3(3-0) Semester 7

Course Objectives:
- Nutrition management in natural and man-made disasters

Course Outline:
- Introduction to disasters, general strategies before, during and after disasters
- Role of national and international relief organizations
- Nutrition and Health Policies related to short- Mid- and Long-term strategies and caring for vulnerable groups
- Nutrition rehabilitation during disasters, water and sanitation, availability of relief goods and health inspection facilities
- Nutritional consequences of disasters, Diseases and malnutrition: Types, nature and severity, mobile feeding units
- Emergency Nutrition: counseling in hospitals and health units, food and nutrition priorities, types and nature of food supplies, feeding units at institutions

Lab Outline:
- None

Reference Books:
1. Pan American Health Org. A guide to emergency health management after disasters

APPLIED NUTRITION (M13- FN)

Credit Hours: 3 (2-1) Semester 8

Course Objectives:
- To study the current nutrition issues with special reference to Pakistan.

Course Outline:
- Food and Population: World population perspective with special reference to Pakistan. Social, economic and environmental factors
- Application of methods of nutritional assessment.
- Planning of nutritional surveys.
- Nutrition Intervention Strategies and Planning of Nutrition Programs.
- Human Nutrition and Food Toxicology.

Lab Outline:
- Literature Review report

Reference Books:

NUTRITION: HEALTH AND PREVENTION (M14 – FN)

Credit Hours: 3 (3-0) Semester 8

Course Objectives:
- To study the role of nutrients in the prevention of chronic diseases and disorders.
Course Outline:
- Health and Dietary Fiber
- Obesity and Health risks
- Dental Health
- Cancer and nutrition
- Infantile Diarrhea
- Nutritional disorders with lasting effects: Nutritional anemia and Iron overload
- Eating disorders (anorexia nervosa, bulimia)
- Diabetes Mellitus.
- HIV/ AIDS

Lab Outline:
- None

Reference Books:

SPORTS NUTRITION (E3-FN)

Credit Hours: 3 (3-0) Semester 8

Course Objectives:
- To study the principles of sports nutrition
- To develop understanding of healthy nutrition practices in sports nutrition

Course Outline:
- Introduction to sports nutrition.
- Goals of nutritional fitness.
- Nutrition Principles and requirements applied to Fitness & Sports.
- Stress Management and Physical Fitness.
- Sports and supplements. Types and uses. Use & Misuse
- Eating Disorders in Sports
• Healthy Physical Activities and Safe Weight Management. Post exercise meal

Lab Outline:

Reference Books:

FOOD ALLERGIES (E4-FN)

Credit Hours: 3 (3-0) Semester 8

Course Objectives:
• To learn about the food allergens and Immune system

Course Outline:
• Immune System: An introduction
• Historical Progress in immunology
• Immunity: Innate and Adaptive
• Immune cells: T and B cells, differentiation and interactions, antibodies, antibody-antigen interactions, macrophages, phagocytes.
• Immunization and vaccines
• Immunization principles
• Immunization types
• Vaccines
• Allergy, etiology, symptoms, diagnosis and prevention.
• Food Allergens
• Foods that improve immunity
• Nutrients and immune system
• Types of Food Allergens (Egg, meat and Fish, milk, honey, cereals and beans)
• Food Intolerance: lactose, fructose, gluten and nutritional support.

Lab Outline:
• None

Reference Books:
3. **MAJOR & ELECTIVE COURSES FOR HUMAN DEVELOPMENT AND FAMILY STUDIES**

**DEVELOPMENT FROM PRENATAL TO INFANCY: (M1-HD)**

Credit Hours: 3 Semester 5

**PREREQUISITES:**

**Course Objectives:**
- To introduce students to the importance of context on developmental processes that take place before birth, and shortly afterwards, and the impact that such processes have on shaping lifespan development.

**Course Outline:**
- Prenatal Development.; Stages of Prenatal Development
- The role of Heredity & Environment
- Hazards during Prenatal Life
- Care of Mother During Pregnancy: physical, psychological, post natal
- Neo-natal period; adjustments; reflexes
- Infant Development
- Hazards and care during infancy.

**Lab Outline:**

**Reference Books:**

**CHILDHOOD CARE AND DEVELOPMENT (M2-HD)**

Credit Hours: 3 (2+1) Semester 5

**PREREQUISITES:**

**Course Objectives:**
- To stimulate healthy integrated early childhood development
- To promote the development of positive social skills.
To understand the importance of encouraging children developmental growth by providing an environment that encourages learning through action, inquiry and exploration.

By the end of the course you will be able to apply the theories, concepts and methods presented in the course to developmental questions or problems of your own choosing.

Will be familiar with some aspects of the professional application of developmental psychology and its place in our society, so that you can appraise its various roles and functions.

Aware of the research methods used to study child development and able to understand them.

Course Outline:
- Introduction to The Child development studies: Definition, Importance and Scope of Child Development, Methods of Studying Child Development
- Toddler hood: Physical development, Psychosocial development intellectual development.
- Early Childhood: Physical development, Psychosocial development intellectual development
- Late Childhood: Physical development, Psychosocial development intellectual development
- Hazards and Care: Physical and Psychological

Lab Outline:
- Observations at the early childhood stage
- Preparation of observation reports for parents and teachers.

Reference Books:

ADOLESCENT DEVELOPMENT (M3-HD)

Credit Hours: 3 (3+0) Semester 5
PREREQUISITES:

Course Objectives:
- Be able to describe the central developmental issues of adolescence
- Understand, evaluate, and critique concepts and theories that pertain to adolescent development
• Demonstrate knowledge of contextual influences on adolescent development
• Be able to think critically about the scientific and non-scientific information that provides the basis for our understanding of adolescent development
• Be able to apply course material in professional settings.

Course Outline:
• Characteristics of Adolescence
• Puberty: Physical and Psychological impact
• Basis and Outcome of Adolescent Behavior
• Theoretical perspectives: Piaget’s theory of cognitive development, Kolberg’s theory of moral development, Erickson’s theory of psychological development.
• Delinquency and Other Behavioural Problems.
• Guidance and Counseling for adolescents.

Lab Outline:
• Evaluating the research literature related to Adolescent Psychology

Reference Books:
1. AL-Quran

ADULTHOOD AND AGING (M4-HD)

Credit Hours: 3 Semester 5
PREREQUISITES:

Course Objectives:
• To critically evaluate the factual information that is basis of our scientific understanding of adult development.
• Describe the components of genetics and environment that contribute to optimal adult development.
• Illustrate the difference between myths of aging and scientifically researched areas of aging

Course Outline:
• Introduction: Gerontology an overview, Theories of Gerontology; Importance; Gerontology in Pakistan and throughout the world.
• Adulthood and Aging: Biological changes; Cognitive functions; Personality development;
• Stages/adult development; Death, dying, grief
• Aging: a multi-disciplinary Approach: Biology of aging-physical examination, developmental aspects, health changes, and Nutrition; Psychology of aging-personality, perception, response/motivation; Social psychology of aging-social interaction, body language, and communication.
• Social analysis of Aging: The family, Styles and lifestyles, Gender, Work, retirement and leisure, Rural versus Urban.
• Care of the Elderly: Understanding and dealing with problems, Counseling of elderly, Health care, Institutional services and care.

Lab Outline:
• Survey related to issues of aging.

Reference Books:

POSITIVE PSYCHOLOGY (M5-HD)

Credit Hours: 3 Semester 6
PREREQUISITES:

Course Objectives:
• Learn about positive emotions, their conceptualization and measurement. Diminishing negative thinking and limiting beliefs and building persistence and resiliency

Course Outline:
• Introduction to Positive Psychology
• Positive States of Mind and Being: Maslow, Rogers, Czikszentmihalyi; and Eastern psychologies
• Positive Traits, Values, Virtues, and Attitudes: Self-esteem; Self-Efficacy; Meaningfulness; Optimism; Forgiveness.
• Positive Emotions: Happiness, or Subjective Well-Being
Lab Outline:

Reference Books:

EARLY CHILDHOOD EDUCATION AND GUIDANCE (M8-HD)

Credit Hours: 3 Semester 6
PREREQUISITES:

Course Objectives:
- The purpose is to promote school readiness and respond learning outcomes of young children by providing high quality professionals development programmes to improve the knowledge and skills of early childhood educators.

Course Outline:
- Introduction to early childhood education: Brief history, goals, objectives and curricular of the, the Montessori Method, The Nursery School, The Kindergarten
- Curriculum Planning: Language and communication skills, Development of motor skills, Pre-academic skills, Social interaction.
- Media and techniques of education: Play, storytelling, Creative media art/music
- Planning and organizing the physical setting in early childhood centres: indoor and outdoor activity areas, Health and safety factors.
- Guidance of the child: Importance Techniques and Principles of child guidance

Lab Outline:
- Planning & presenting experiences for the development of
- Pre-academic skills
- Science general knowledge
- OR
- Creative experience Art/Music
- Planning for activity areas and room organization in the pre-school.
• Developing enrichment materials for under-privileged pre-school children.

Reference Books:

THEORIES OF HUMAN DEVELOPMENT (M10-HD)

Credit Hours: 3 Semester 6

PREREQUISITES:

Course Objectives:
• To understand importance of various perspectives on Human development
• To develop a comprehension understanding of the role of nature and nurture.
• To appreciate the implications of theories of development on life.

Course Outline:
• Historical roots and contemporary views of human development.
• Nature theories of human development. Hall’s theory the instinctual theory of Konrad Lorez.

Lab Outline:
• NA

Reference Books:
COMMUNICATION IN HUMAN AND FAMILY RELATIONS
(M11-HD)

Credit Hours: 3 Semester 6

PREREQUISITES:

Course Objectives:
- Describe how various social structures and processes shape the experiences of families, Understand the family dynamics throughout the life course, emphasizing themes of power, intimacy and family diversity.

Course Outline:
- The Process of Communication, Improving communication skills.
- Functions of Interpersonal and Intrapersonal Communication.
- Stages of relationship development: self disclosure within relationships, Conflict within relationships, improving efforts to resolve conflicts, Building self-esteem and self concept.
- Communication in families: Basic family processes and communication, Communication within family subsystems, Communication and family stress, developmental issues, improving family communication.
- Human Communication and Problem Solving: Creating a positive communication climate,
- Solving problems as a group, Dyadic and small-group communication.

Lab Outline:
- Collecting, compiling, analysis, synthesis and reporting of events regarding communication problems
- Seminar presentation of report
- Preparation of journal

Reference Books:
ABNORMAL PSYCHOLOGY (M9-HD)

Credit Hours: 3 Semester 7
PREREQUISITES:

Course Objectives:
- The students will be able to focus on the causes, consequences and treatment of maladaptive behaviour
- Explore historical views and current perspectives of abnormal behaviour.
- Emphasis major diagnostic categories and criteria, individual and social factor of maladaptive behaviour and type of therapy
- Describe the primary objective of abnormal psychology, including description, exploration, prediction and control of abnormal behaviour.

Course Outline:
- The psychoanalytic perspective, the trait perspective, The Humanistic perspective, The Social Cognitive Perspective.
- The different sources of Behaviour - personality trait VS. situational influence, Social Influence and Group Behaviour, Social comparison; conformity; compliance, Group Dynamics Group influence; individual performance/Group problem solving / Social roles.
- Psychological Disorders, Models of Abnormal Behavior, Neurosis, Psychosis, Personality Disorders: Disassociative Disorders, Affective Disorders
- Therapies: The psychological therapy, The Biomedical therapy

Lab Outline:
- Clinical Attachment

Reference Books:

ELEMENTARY EDUCATION (M9-HD)

Credit Hours: 3 Semester 7
PREREQUISITES:

Course Objectives:
- To apply analytical and problem-solving skills to personal, social and professional issues and situations.
- To communicate orally and in writing, socially and interpersonally.
• To develop an awareness of the contributions made to civilization by the diverse cultures of the world.
• To understand and use contemporary technology effectively and to understand its impact on the individual and society.
• To work and study effectively both individually and in collaboration with others.
• To understand what it means to act ethically and responsibly as an individual in one's career and as a member of society.
• To develop and maintain a healthy lifestyle, mentally, physically and spiritually.
• To appreciate the ongoing values of learning, self-improvement and career planning.

Course Outline:
• Introduction to elementary education:
• scope and current trends of Elementary Education
• Instructional Strategies
• Classroom management skills; Time management; Motivation; Organizing learning experiences
• Planning for effective teaching:
• Definition, Importance; Essentials; Resource for planning; Lesson planning (the daily lesson plan); Construction a lesson plan; Lesson plan format
• Measurement & evaluation in teaching
• The role of evaluation in teaching; The meaning of evaluation; The principals of evaluation; Types of testing & evaluation procedures
• Family and school relationship
• Introduction; Effects of family; Schools linkages; Barriers of family school linkages;
• Principals of family schools partnership; Parent's conference

Lab Outline:
• Plan and carry out five lesson plans (along with the supporting teaching aids)
• Preparation of the file and viva
• Planning and presentation of a lesson plan for the exam.

Reference Books:
GUIDANCE AND COUNSELING (EI-HD)

Credit Hours: 3 Semester 7
PREREQUISITES:

Course Objectives:
- The students will be able to provide counseling service for people with personal problems great or small
- They will be able to advice and guide on career planning, financial matter etc

Course Outline:
- Concept and the process of Guidance and Counseling
- Objectives of Guidance.
- Principles of Guidance
- Area of Guidance.
- Personal Guidance
- Vocational Guidance
- Social guidance
- Activities of Guidance Program.
- Orientation Science
- Educational and vocational service
- Testing service
- Counseling Service
- Placement service
- Follow-up service
- Research and Evaluation Service
- Techniques of Guidance: Observation, Case Study, Interview, Anecdotal Record
- Ethics of Guidance: Meaning of confidentiality in Guidance, Principles of Confidentiality

Lab Outline:
- Internship in a clinical setting

Reference Books:

HUMAN AND FAMILY ECOLOGY (EI- HD)

Credit Hours: 3 Semester 7

PREREQUISITES:

Course Objectives:
- Describe the philosophy and purpose of human ecology as a field of academic study and
- Professional practice, understand and interpret key human ecological models, understand the relevance of, and demonstrate competence in, fundamental skills for
- Practicing human ecologists, including leadership, reflective practice, communication and decision making.
- Course Outline:
  - Introduction, Philosophy & mission of human ecology; Core concepts & values; Subfields of human ecology Theory in human ecology; Fundamentals of systems theory ; Human ecological models in practice
  - Ethical issues in human service from a human ecological perspective
  - Review of Issues and Trends in Family Ecology and Practice:
    - Poverty from a family ecological perspective
    - Leadership approaches from a family ecological perspective
    - Modern consumer practices from a Family ecological perspective

Lab Outline:

Reference Books:
EXCEPTIONAL CHILDREN (E2-HD)

Credit Hours: 3 Semester 7

PREREQUISITES:

Course Objectives:
- To give the participants an understanding of the exceptional child and the implications of teaching for this population of students.
- Explore the identifying characteristics of students with disabilities and their distinct exceptionalities.
- To enable them to understand the best practices techniques of teaching these students in regular class.

Course Outline:
- Introduction to Exceptionality: Definition and Classification of Exceptional Children
- Rehabilitation of children with learning disability children.
- Sensorial disability: types and rehabilitation.
- Physical disability: classification, and rehabilitation program.
- Gifted children: who are gifted? How they can be identified? Some basic strategies for the intellectually superiors.
- Role of family and community in the rehabilitation of special children.

Lab Outline:

Reference Books:
5. Visit Amazon's K. Eileen Allen Page
6. Find all the books, read about the author, and more.
7. See search results for this author
8. Are you an author? Learn about Author Central
FAMILY DYNAMICS (E2-HD )
Credit Hours: 3 Semester 7
PREREQUISITES:

Course Objectives:
- It includes instruction in dimensions of marriage and changing role of women.
- Family decisions and responsibilities, parenting decisions and responsibilities.
- Management of family systems in today’s society.

Course Outline:
- Social change, Dynamics of family interaction,
- Conceptual analysis of family interaction patterns, Family decisions and responsibilities.
- Theories and strategies for helping families deal with crises.
- Dimensions of marriage, Changing roles of women,
- Families in crisis, parenting in crisis, aging in the family.
- Management of family systems

Lab Outline:

Reference Books:

EDUCATIONAL PSYCHOLOGY AND MEASUREMENT TECHNIQUES (M13-HD)
Credit Hours: Semester 8
PREREQUISITES:

Course Objectives:
- To promote and maintain high standards of professional education and training within the specialty, and to expand appropriate scientific and scholarly knowledge and the pursuit of scientific affairs; to increase effective and efficient conduct of professional affairs, including the practice of psychology within the schools, among other settings, and collaboration/cooperation with individuals, groups, and organizations in the shared realization of Division objectives.
Demonstrate knowledge of effective educational practices and the skills necessary to deliver psychological services in school settings.

Course Outline:
- Educational Psychology: An Introduction and Contribution of educational psychology
- Contribution of School of Psychology in Education: Structuralism, Functionalism, Behaviorism, Psychoanalysis, and Gestalt School of Psychology.
- Educational Implications of Developmental Theories: Piaget, Erickson, Vygotsky, and Kohlberg.
- Theories of Learning: Meaning of learning, Implication of learning for teachers, Motivation and classroom learning: Definition and importance of motivation, Types of motivation Function of motivation.
- Intelligence and classroom learning: Definition and types of intelligence, Theories of Intelligence, Multifactor theory (two factor theory, Guilford’s theory), Measuring intelligence (Binet’s intelligence scale, Waschler’s intelligence scale).

Lab Outline:
- Learning to administer any two of the following 16 P. F, S. P. M., Weschler, TAT
- Collecting evidences through audio visual aids to confirm the theories Planning Curriculum for various grades

Reference Books:

PLANNING AND MANAGING HUMAN SERVICE PROGRAMME
(MX6-HD)

Credit Hours:3 Semester 8
PREREQUISITES:

Course Objectives:
- Demonstrate understanding of the purpose and processes of human services program development and administration
- Apply principles of effective management to real life problems in human services settings
• Develop effective human services program goals and objectives based on needs assessment and linked to program design and evaluation
• Critically evaluate and propose solutions to current challenges and opportunities facing human service organization.

Course Outline:
• The concept of human services: the integrated concept, generic concept. Human service workers: agents of change.
• History of helping: early human services, the golden age, the dark ages, age of reasoning, recent history
• Human services: defining boundaries, problems, and causes.
• Defining problem behavior / deviance, causality of problem behavior / deviance.
• Planning Techniques: Needs Assessment, Data Collection and Analysis, Budgeting and Evaluation.
• Managing skills: decision making management, organizational behavior, personal motivation, accountability, financial management.

Lab Outline:
• Case study of a maladjusted family. Presentation of the finding

Reference Books:

PSYCHOLOGICAL TESTING (E3a-HD)
Credit Hours:3 Semester 8
PREREQUISITES:

Course Objectives:
• After taking this course, you would: understand the basic principles of psychological testing;
• Be able to evaluate psychological tests;
• Be able to construct and validate a simple psychological test;
• Know some current issues in intelligence testing, personality testing, and educational testing.
Course Outline:
- Basic psychometric concepts: Reliability, Validity, Item analysis
- Tests of a standard battery: Wechslert Intelligence Scale (WAIS, WISC), Minnesota Multiphasic Personality Inventory, Rorschach, Thematic Apperception Test (TAT), Bender-Gestalt
- Interpreting a test battery
- Test Construction: Explain the steps in test development, Create a simple test
- Measures of cognition, personality, behavior and aptitude test.

Lab Outline:
- Test construction & Standardization, adaptation, translation

Reference Books:

GERONTOLOGY: SOCIAL ASPECTS (E3b -HD)
Credit Hours: 3 Semester 8

PREREQUISITES:

Course Objectives:
- Present and explain sociological characteristics of older persons.
- Show the significance of certain variations in aging based on different lifestyles and life opportunities.
- Be familiar with some studies in gerontology, in Pakistani perspective.

Course Outline:
- Social Analysis of Aging I: The Family
- Social Analysis of Aging II: Gender; Retirement Part I—Styles and Lifestyles; Widowhood
- Social Analysis of Aging III: Retirement Part II—Planning, Work, and Leisure
- Social Analysis of Aging IV: Rural vs. Urban, Ethnicity, Class
- Statistical Aspects: Population Aging Issues, Statistics and Research

Lab Outline:
Reference Books:

FAMILY PROBLEMS AND INTERVENTION STRATEGIES:
(E4-HD)

Credit Hours: 3 Semester 8
PREREQUISITES:

Course Objectives:
- Explore gender, race and cultural issues in family therapy.
- Examine the influence of previous generations on current family issues and dynamics.
- Discuss the importance of life transitions and changes across the family life cycle.
- Describe the effect of individual experience (attachment, self-esteem) on family functioning.
- Recall and describe first, second, and third generation family therapy models.

Course Outline:
- Central concepts in analysis of family problems.
- Family life cycle vs. individual life cycle.
- Lifecycle stages associated with separation and divorce.
- The stages of family therapy.
- Stage 1 – planning, Stage 2 – assessment Stage 3 – treatment, Stage 4 - disengaging or reconstructing
- Three organizing themes: behavior patterns, beliefs, and contexts.
- Preparing to begin family therapy, including engagement, assessment, and goal setting, Approaches to intervention with families, Working with families coping with life-stage, health, and mental health

Lab Outline:

Reference Books:

DAY CARE MANAGEMENT AND ADMINISTRATION (E4- HD)

Credit Hours: 3 Semester 8

PREREQUISITES:

Course Objectives:
- To learn and understand the fundamentals of this important Child Day Care Management
- To comprehend all aspects of child day care management from business start-up to administrative management.

Course Outline:
- Child Day Care Management: An Introduction; The Role of the Child Care Worker; Interacting with Child Care Workers; Fostering Self-Esteem and Showing Approval; Changes in Children: 12 Months to 10 Years; Financial Statements and the Business Plan
- Administration of Programmes for Young Children; Schools and Programs; The Programme and Environment of Planning; Setting Programme Goals; Planning for Infants and Toddlers and Preschool-Age Children; Communication Styles and Listening Skills; Sharing Unpleasant Information with Parents.
- Planning and Staff Decision Making; Staff Selection; Personnel Policies; Staff Supervision and Training; Student Teachers/Volunteers
- Management Issues; Budget Management; Maintenance, Health, and Safety; Food and Nutrition Services; Including Families and the Community; Maintaining the Quality of Child Care; Computerized Center Administration
- Planning for Profit in Your Child Care Business; Setting Your Professional Goals; Contracts and Policies; Rates, Fees, and Collection; Financial Determination; Marketing Strategies.

Lab Outline:
- Your Child Care Business Plan: develop and report

Reference Books:

4. **MAJOR & ELECTIVE COURSES FOR INTERIOR DESIGNING AND ENVIRONMENTAL MANAGEMENT**

**INTERIOR SPACE PLANNING – I (M1-ID)**

**Credit Hours:** 4 (2+2) Semester 5

**PREREQUISITES:**
Completion of Semester IV

**Course Objectives:**
- Inculcating the special design requirements for different interior spaces.
- Establishing relationship between human needs and interior types.
- Propagating the special design features of specialized interior environments (commercials out lets health care units etc.)

**Course Outline:**
- Need-base design, planning: behaviour vs. design
- Designing interior spaces (circulation spaces, utility spaces).
- Planning & designing shops / departmental stores.
- Planning and designing clinics (dental clinics / health clinics)

**Lab Outline:**
- Space planning activity based on residential interior.
- Report on the area planned.

**Reference Books:**
FUNDAMENTALS OF INTERIOR ARCHITECTURE – I (M2-ID)

Credit Hours 3 (2+1) Semester 5

PREREQUISITES

Completion of semester IV

Course Objectives:
- Importing skills to practice as professional interior designer understanding the local market demands.
- Developing understanding of field of interior design in the historical context.
- Inculcating the aesthetic sense to appreciate and evaluate varied aspects of design.

Course Outline:
- Historical background of interior architecture and design.
- Egyptian, Greek, Roman, Mesopotamian, Islamic.
- History of interior design, Interior design’s role & responsibilities interior designer.
- Design organization, sources of design, significance of design in space organization, application of design in interior environments.

Lab Outline:
- Portfolio covering the content of course

Reference Books:

DESIGNING THE FURNITURE (M3-ID)

Credit Hours 3 (2+1) Semester 5

PREREQUISITES

Completion of semester IV

Course Objectives:
- Introducing the history of furniture design
- Imparting knowledge on various types of furniture including various manufacturing techniques and finishing.
- Developing the aesthetic appreciation for need based furniture.
Course Outline:
- History of Furniture Design
- Furniture manufacturing techniques
- Types of furniture
- Major furniture materials in Pakistan (wood, metal etc.)
- Furniture finishes (polish, lacquer, deco paint etc.)
- Upholstery fabrics and other materials.

Lab Outline:
- Developing a proto type of a furniture
- Project inspired through nature

Reference Books:

INTERIOR DESIGN APPLICATION (PERSPECTIVE DRAWING) (M4-ID)
Credit Hours 3 (1+2) Semester 5
PREREQUISITES
Completion on semester IV

Course Objectives:
- To teach perspective drawing techniques
- Introduce basic principles of floor plan & furniture arrangements.
- Prepare students for visual interior design communication

Course Outline:
- Introduction to Perspective drawing.
- Different types of Perspective drawing
- Basic principles of floor planning

Lab Outline:
- Elementary drawings
- Interior Design proposals for residential areas
- Interior Design proposals for commercial areas
- Presentations on latest trends in different areas of interior design.
ENVIRONMENTAL AESTHETICS (M5-ID)

Credit Hours: 4 (2+2) Semester 6

PREREQUISITES:
Completion of Semester V

Course Objectives:
- Introducing the historical context of environmental aesthetics
- Developing aesthetics appreciation of interior environments.
- Developing strategies to control visual pollution.

Course Outline:
- Introduction to environmental aesthetics
- Theoretical framework for environmental aesthetics
- Aesthetics and buildings (building in relation to natural setting).
- Architectural experience with building
- Emotional effect of design
- Visual pollution

Lab Outline:
- Evaluation of building aesthetics (project base)
- Portfolio

Reference Books:
FUNDAMENTALS OF INTERIOR ARCHITECTURE – 2 (M6-ID)

Credit Hours 3(2+1) Semester 6

PREREQUISITES

Completion of semester V

Course Objectives:
- Importing skills to practice as professional interior designer understanding the local market demands.
- Inculcating understanding and application of colour theories in interior environments.
- Acquiring skills to select appropriate lighting types for various interior environments.

Course Outline:
- Role of colour
- Color theories, symbolism, physiological & psychological effects properties and distribution of colour. Colour harmony & design concept vocabulary of colour, latest trends
- Role of lighting in interiors. Lighting properties, Lighting psychology; Latest trends in lighting

Lab Outline:
- Presentations on the effects of colour and light in interior environment through multimedia and other visual aids.

Reference Books:
DESIGNING FOR SOFT FURNISHINGS (M7-ID)

Credit Hours 3(2+1) Semester 6

PREREQUISITES
Completion of semester V

Course Objectives:
- Developing an understanding regarding the traditional motifs and design of south Asian region on modern contemporary arts and crafts.
- Evaluating the traditional and modern decorative textiles and upholstery.
- Assessing the traditional and contemporary floor coverings.

Course Outline:
- A study of traditional motifs and designs and their influence on contemporary art forms Islamic, Indo Pakistan, Egyptian, oriental and Christian.
- A review of decorative textiles and upholstery
- A study of traditional and contemporary floor coverings.

Lab Outline:
- Portfolio on motifs and designs studied in course content.

Reference Books:

INTERIOR ENVIRONMENT: PHYSICAL ASPECTS (M8-ID)

Credit Hours: 3 (2+1) Semester 6

PREREQUISITES:
Completion of semester V

Course Objectives:
- Developing holistic understanding of all aspects of interior environments.
• Promoting the significance of passive environmental control system (heating, cooling).
• Developing strategic application of glare control and noise control measures.

Course Outline:
• Lighting (Glare Control)
• Acoustics (Noise Control)
• Passive Control system: Heating
• Passive control system: cooling
• Interior surfaces (walls, floors, ceilings)
• Storage Design

Lab Outline:
• Mini project of interior environment evaluation.

Reference Books:

INTERIOR SPACE PLANNING - 2 (M9-ID)

Credit Hours: 4 (2+2) Semester 7
PREREQUISITES:
Completion of semester VI

Course Objectives:
• Inculcating special design requirements for different interior spaces.
• Propagating the special design features of specialized interior environment, Health clubs, leisure centre, gym centres, beauty parlours etc.
• Propagating the special design feature of specialized interior environments (workspaces, restaurants schools).

Course Outline:
• Need based design planning: behaviour vs. design
• Planning & designing health club and leisure centres
• Planning & designing restaurants
• Planning & designing work spaces.
Lab Outline:
- Space planning activity for any commercial areas, restaurants, healthcare center, office spaces, etc.
- Report on the specific planned area.

Reference Books:

INTERIOR DESIGN PROJECTS – I (M10-ID)
Credit Hours 4 (0+4) Semester 7

PREREQUISITES
Completion of semester VI

Course Objectives:
- Importing knowledge in the students about furniture designing and applying that knowledge from a theoretical and practical point of view.
- Making students understand the importance of the principles of Ergonomics and its relationship with human body.
- Helping students learn and analyze the issues which are central in design management and understanding the role of furniture in creating market demand and shaping consumer behaviour.

Course Outline:
- Not Applicable

Lab Outline:
- Analysis of furniture items from theoretical and practical aspects.
- Creation of furniture items through the use of:
  - Conception of an idea, execution through full scale drawing
  - Actual construction of two projects keeping the rules of ergonomics up front.
  - Renovation, redesigning and restoring of an article.
  - Creating a product focusing mainly on aesthetic as well as functional aspects.
- Feasibility Report.
Reference Books:

ENVIRONMENTAL MANAGEMENT (EI-ID)

Credit Hours 4 (3+1) Semester 7

PREREQUISITES

Completion of semester VI

Course Objectives:
- Raising awareness on major global, regional and local environmental issues.
- Promoting significance of healthy environments on individual and community.
- Acquiring knowledge and understanding on dimensions of sustainability in relation to built environment.

Course Outline:
- Major environmental challenges faced by developed and developing world in the 21st Century.
- Measures to control environmental problems in Pakistan.
- Urbanization and its environmental implications with reference to built environment.
- Dimension of sustainability in relation to buildings and interiors.

Lab Outline:
- Developing an educational environment campaign focused on interior and environmental design.

Reference Books:
DESIGNING FUNCTIONAL SPACES FOR SPECIAL NEEDS
(E2-ID)

Credit Hours: 4 (2+2) Semester 7

PREREQUISITES:

Completion of semester VI

Course Objectives:
- Including significance of interior environments for people with special needs.
- Introducing the concepts of ergonomics in regards to interior design elements.
- Developing skill to design special activity areas for specialized needs.

Course Outline:
- Functionally designed spaces for people with special needs in homes and at work places.
- Ergonomics: Definition and Explanation
- Historical background of Ergonomics
- Physical Ergonomics and significance of functional space requirements.

Lab Outline:
- Research activity based on functional space planning for people with special needs.

Reference Books:

ADVANCE COMPUTER APPLICATION FOR INTERIOR DESIGN
(M13-ID)

Credit Hours: 4 (1+3) Semester 8

PREREQUISITES:

Completion of Semester VII

Course Objectives:
- Using CAD effectively to create floor plans, elevation etc.
• Creating standard symbols and details
• Developing complete computer generated set of drawings.
• Course Outline:
• Computer generated floor plans
• Symbols of furniture & fittings
• Furniture plan
• Section and details of partitions
• Various finishing and equipment plans.

Lab Outline:
• Portfolio design
• Computer generated set of drawings.

Reference Books:
1. Auto CAD 2008 for Interior Design and Space Planning by Baverly L. Kirkpatrick.

INTERIOR DESIGN PROJECTS – 2 (M14-ID)
Credit Hours 4 (0+4) Semester 8
PREREQUISITES
Completion of semester VII

Course Objectives:
• Importing knowledge in the students about furniture designing and applying that knowledge from a theoretical and practical point of view.
• Making students understand the importance of the principles of Ergonomics and its relationship with human body.
• Helping students learn and analyze the issues which are central in design management and understanding the role of furniture in creating market demand and shaping consumer behavior.

Course Outline:
• Not Applicable

Lab Outline:
• Planning / conception, execution of a commercial project through conception of an idea full scale drawing model ¼ scale of a project, construction and application of various techniques learned through the academic years.
• Conceiving and planning of a space and presenting ideas through varied visual techniques
• Feasibility report.

Reference Books:

INTERNIOR DESIGN PROFESSIONAL PRACTICE
MANAGEMENT (E3-ID)
Credit Hours: 3 (2+1) Semester 8
PREREQUISITES:
Completion on Semester VII

Course Objectives:
- Developing the managerial skills for interior design practice
- Understanding the financial management requirements for interior design practice.
- Familiarizing with legal and ethical codes and standards associated with interior design practice.

Course Outline:
- Business Procedure associated with interior design practice
- Financial management
- Legal liabilities
- Ethical practices
- Specification & codes
- Writing proposal & contracts
- Contract schedule
- Contract negotiation
- Project administration

Lab Outline:
- Report Based on course contents.
- Multimedia presentations.

Reference Books:
2. Maurer T. L. & Katie. W. Design in Practice: Case studies of successful Interior business models. Amazon.com
CONSUMER, MARKETING STRATEGIES (E4-ID)

Credit Hours 3 (2+1) Semester 8

PREREQUISITES

Completion on semester VII

Course Objectives:
- Defining market and marketing strategies in modern economic activities.
- To prepare students in client dealing
- Teaching individual strategic planning marketing techniques.

Course Outline:
- Definition and Scope; marketing function; who perform the marketing function;
- Definition of consumer; Role and responsibilities
- Management and marketing; Definition and scope of management and market; Strategic planning; meaning importance and step of strategic planning; Developing a target market strategy
- The product development; what is a product? Product objective. An analysis of competition position; Trends and market.

Lab Outline:
- Report on market trends and product analysis.

Reference Books:
5. MAJOR & ELECTIVE COURSES FOR RESOURCE AND FACILITY MANAGEMENT

ESSENTIALS OF MANAGEMENT (M1- RFM)

Credit Hours: 3 Semester 5
PREREQUISITES:

Course Objectives:
- To develop understanding of issues relevant to management and communication and enhance skills for managing and communication.

Course Outline:
- The Necessity of Management; Scope of Management; The setting for Modern Management; Scientific management, movement, management and changes.
- Patterns of Management Analysis: The empirical approach; The behaviour approach; The operational theory approach; the decision theory: approach
- The Management Environment; Internal environment; External environment; International environment
- Functional Explanation for Management; Planning for efficiency; Organizing for stability;
- Leadership for influencing people; Motivation for self actualization; Staffing for human resources development
- Controlling for effective results

Lab Outline:

Reference Books:

ENTREPRENEURSHIP OF HOME BASED INDUSTRY (M2- RFM)

Credit Hours: 3 (2+1) Semester 5
PREREQUISITES:

Course Objectives:
- To develop understanding of entrepreneurship in home economists for home based micro industries.
Course Outline:
- The nature and importance of entrepreneurs in home based industries: Definition of Entrepreneur, Entrepreneurial Carriers, and responsibility of Entrepreneurs.
- The entrepreneurial mind in home based industries: the entrepreneurial process, identify and evaluate the opportunity, Determine the Resources Required, Manage the Home based enterprise.
- Entrepreneurial Decision making; strategic orientation and commitment to opportunity.
- Control of Resource, Management and structure.
- The individual entrepreneur: Entrepreneurial Feelings, Locus of Control, feeling about independence and need for achievement, risk taking.
- Entrepreneur background and characteristics: childhood family, Environment, education, personal values, age, work history, motivation, professional, support network, male and female entrepreneurs.

Lab Outline:
- The students have to submit a research report about any home based industry of their choice.

Reference Books:

MANAGEMENT OF HOUSEHOLD AFFAIRS (M3- RFM)

Credit Hours: 3 (2+1) Semester 5

PREREQUISITES:

Course Objectives:
- To develop understanding of issues relevant to management of household affairs and enhance skills for management of household affairs.

Course Outline:
- Home Management in operation; Definition, Women’s role as Home Economist; Problems of employed Home Maker and its management
- Management for and by the families; Definition & stages of family; Problems at various stages and their management
- Critical analysis of Pakistani families; Values, Goals and Resources of families
- Work simplification: Definition; Classes/levels of change to simplify work
- Techniques for studying work simplification.
• Family and Socio-cultural changes; Definition and causes of change; Obvious changes in society; Factors causing changes in family, Managing change
• Families under stress; Definition and sources of stress; Family responses to stressful situation; Violence, Divorce, Illness, Abuse, Death.

Lab Outline:
• Make a personal record of time-used for one week
• Use work simplification study technique (process, operation and pathway chart) for one household activity.
• Take any conflict caused problem from daily life and suggest its resolution by optimal decision making.
• Demonstrate the use of some important home related equipments/appliances like iron, micro wave, sandwich maker, toaster, Juicer blender.
• Maintain a file for practical.

Reference Books:

FUNDAMENTAL OF MARKETING (M4- RFM)

Credit Hours: 3 Semester 5
PREREQUISITES:

Course Objectives:
• To develop understanding of issues relevant to marketing & entrepreneurship and enhance skills for marketing & entrepreneurship.

Course Outline:
• Marketing: Definition of marketing; Marketing functions; Target market and marketing mix.
• Marketing Information System; Marketing Research Process.
• Marketing Segmentation; Marketing matching strategies; the mars-market strategy; The marketing segmentation strategy. Targeted
Marketing: Developing a targeted marketing strategy; Analyze the relevant market; Analyze characteristics and wants of potential customers; Identify basis for segmenting the market; Define and describe market segments; Analyze competitors’ positions; Evaluate market segments; select the market segments; Finalize the marketing mix.

- The Product: What is product!; The product life cycle; The adoption and diffusion process; Product mix and product line. The new product development process; Brands packaging
- Marketing Channels: What are marketing channels; Channels structures; Influences on channel development; Channel planning; The communication process; The promotion mix; Factors influencing the promotion mix; Objectives of promotion activities
- Pricing: scope and meaning of price; Pricing objectives & strategies; New products pricing

Lab Outline:

Reference Books:

ESSENTIALS OF COMMUNICATION 2 (M5- RFM)

Credit Hours: 3 Semester 6

PREREQUISITES:

Course Objectives:
- To develop understanding of issues relevant to effective Communication and enhance skills for communication.

Course Outline:
- Effective Communication; Competencies of good communication; Benefits of improved communication in the workplace and elsewhere; Emotional intelligence and how it relates to communication competencies
- Communication Preferences; The impact of the four Myers-Briggs scales; Effects of personality type on methods of communication; Work preferences Recommended for a variety of Myers-Briggs types; The effect of various response styles in different work place situations
- Listening; Skills needed to listen actively; The role of nonverbal communication in listening
- Assertive Communication Skills; Optimizing your message and your meaning when it's your turn to speak;
- Assertive communication skills
• Coping with communication anxiety; Managing criticism; Communicating with Difficult People; Decreasing defensiveness in a challenging situation; Remaining assertive during challenging conversations
• Analyzing difficult people; Building rapport; Non-verbal factors that influence challenging communication.

Lab Outline:

Reference Books:

HOUSEKEEPING MANAGEMENT (M6- RFM)

Credit Hours: 3 (2+1) Semester 6
PREREQUISITES:

Course Objectives:
• To develop understanding of issues relevant to Management of living spaces and enhance skills for management of living spaces.

Course Outline:
• Introduction to Housekeeping Management; Lodging operations; Role of Executive Housekeeper
• Organization of the housekeeping department; Structural planning; Staffing patterns
• Technical skills management
• Equipment and supplies; Inventory of equipment; Linen
• Laundry and Cleaning
• Cultural diversity and housekeeping department

Lab Outline:
• Interior design project: individual projects to be developed and presented for practical evaluation.
• Interior designing of residence houses for a supposed specific family.

Reference Books:
2. Housekeeping; Management, 2nd Edition; Margaret M. Kappa HTM338; Aleta Nitschke; Patricia B. Schappert, Educational Inst of the Amer Hotel; 2nd Edition (1997).
HOME MANAGEMENT SUPERVISION (M7- RFM)

Credit Hours: 3 (2+1) Semester 6

PREREQUISITES:

Course Objectives:
- To develop understanding of issues related to residence and enhance skills of students to act as residence supervisor.

Course Outline:
- Supervision in Home Management Residence: College practice house as an educational factor of importance.
- Identification of problem and solving it as a group.
- Role of the Home Management Adviser.
- Guidance and directions; Record keeping; Maintenance of the house.
- Need and scope of research on managerial practices in the homes.

Lab Outline:
- Students must live in the Home Management Residence for purpose of observation and supervision for a specific period and work closely with the Home Management Supervisor.

Reference Books:
ORGANIZATIONAL BEHAVIOUR (M8- RFM)

Credit Hours: 3 Semester 6

PREREQUISITES:

Course Objectives:
- To develop understanding about importance and determinants of organizational behaviour

Course Outline:
- Introduction: What is organizational behavior? Application to organizational behaviour; Cognitive framework; Behaviorist, Social & Organizational framework
- Perception: The nature and importance of perception;
- Personality
  a. The meaning of Personality: The self-concept, self-esteem and Self-efficiency
  b. The development of personality: Adult life stages; Immaturity to maturity
  c. Major determinants of personality: Biological, cultural & situational contribution
- Motivation: Meaning; Primary, secondary and general motives
- Group Dynamic: Nature and types of groups; Committee organization: Nature and function of committee; Positive and negative attributes of committee; Dynamics of informal groups: Norms and roles in informal groups; Informal managerial roles and organization structure
- Interactive Behaviour and Conflicts: Intro-individual conflicts; Interpersonal conflicts; Inter group behaviour and conflict; Organizational conflict
- Job Stress: Meaning and background; Causes of stress; Organizational, extra-organizational; group and individual stresses; Effects of job stress
- Physical, psychological and behavioural problems due to stress; Coping strategies; Individual and organizational strategies
- Power and Politics: Meaning & distraction of power and authority;
- Classification of power; Political implication of power; Political perspective of power in organization; Political strategies for power acquisition.

Lab Outline:

Reference Books:
HUMAN RESOURCES MANAGEMENT (M10- RFM)

Credit Hours: 3 Semester 7

PREREQUISITES:

Course Objectives:

Course Outline:
- The development of human resources management: the concept of human resources management; early stages in development; human resources management as a profession.
- The contemporary environment changes and challenges: elements of an organization’s environment; changes that challenge managers of human resources.
- Organizational considerations in managing human resources: the organization as a system & organizational structure; responsibility and authority within the organization; the human resources department in an organization.
- Job requirements:; job design, job analysis & competency approach, job description.
- Human resource planning and requirement: human resource planning. Determining vacancies; recruiting from within & outside the organization; preparing & publishing information. Processing & assessing application; notifying the applicants; EEO/AA in recruitment.
- Analyzing the qualifications of job candidates & selection of employees; matching people and jobs; sources of information about job candidates; process & instruments of selection: interview, & tests.
- Making selection decisions: validation and the selection process; reaching a selection decision; legal requirements that shape selection policies.

Lab Outline:

Reference Books:
CONSUMER ECONOMICS (M11-RFM)

Credit Hours: 3 (2+1) Semester 7
PREREQUISITES:

Course Objectives:
- To develop understanding of issues relevant to consumer economics and enhance skills for consumer economics.

Course Outline:
- Definition of Consumption Economics, Consumption Vs Production Scope of Economics of Consumption
- Basic Concepts; Income, Real income Vs Nominal income, Personal income, Disposable personal income, Wants, Social want, Physiological wants, Price, Price level, Measurement of Price level, Index number, Markets- Perfect competition, Monopoly and Monopolistic competition, National income, GNP, NNP, GDP
- Utility Solution; Definition of Utility, Average utility, Total utility and Marginal utility; Law of diminishing marginal utility, Definition, Assumptions, Utility Schedule, Limitations, Law of equi-marginal utility, Definition, Assumption, Explanation, Limitations
- Indifference curve Subjective Vs Objective satisfaction, Indifference curve, Indifference map
- Properties of indifference curve Consumer equilibrium
- Budget line, Consumer equilibrium, Income consumption curve, Price consumption curve
- National income accounting Consumption function, Saving function, Investment, Two-sector economy
- Three sector economy, Circular flow for three sector economy
- Role of demand in price formation; Perfect competition, Role of demand in price formation under perfect competition. Monopoly, Role of demand in price formation under Monopoly, Oligopoly, Role of demand in price formation under Oligopoly
- Consumer information problems Non-price factors in choice decision, Advertising. Producers and Consumers information problems, Government and consumers information problems.

Lab Outline:
- The students will submit and present a Research Report at the end of the year.

Reference Books:
ENVIRONMENTAL MANAGEMENT (E2-RFM)

Credit Hours: 3 Semester 7

PREREQUISITES:

Course Objectives:
- To develop understanding of issues relevant to Environmental mgt and enhance skills for Environmental mgt.

Course Outline:
- An introduction to environmental management; Definition and scope; Relation of environment and management; Responsibilities of public, private and social sector
- Population, growth and urbanization; Man in his ecological settings; Growth in population and urbanization; Population, growth and its effect on environment
- Environmental degradation; Concept of technology and environment; Land pollution, causes and remedies; Air and water pollution, causes and remedies; Destruction of forest and its effect on environment; Waste disposal
- Environmental aesthetics; Definition and scope; Aesthetic qualities of environment; Ways and means to work towards environmental aesthetics
- Environment and management; Scope of management and environment
- Health and environment; Socio-psychological effects of environment

Lab Outline:

Reference Books:
2. Michael Brower, Warren Leon The Consumer's Guide to Effective Environmental Choices:

FAMILY FINANCE (E2-RFM)

Credit Hours: 3 Semester 7

PREREQUISITES:

Course Objectives

Course Outline:
- Consumers in a changing world
- The consumer movement
- Buying process, brand, and product development
- Decision making and the influence of advertising
- Saving, banking, debt and credit issues
- Insurance and investment basics
- Consumer responsibilities, and law
- Ownership, safety, and repairs
- Government protection, nongovernmental pro-consumer groups
- Identity theft, privacy protection, emerging consumer issues, at risk consumers, and developing a global perspective.
- A global perspective.

Lab Outline:
• Not applicable.

Reference Books:

MANAGEMENT OF INSTITUTIONS: EDUCATIONAL AND HEALTH (E2- RFM)

Credit Hours: 3 Semester 7
PREREQUISITES:

Course Objectives:
- To develop understanding of issues relevant to Management of institutions and enhance skills for Management of institutions.

Course Outline:
- Educational Institutions:
  Concept of school/college organization, meaning, scope and principles
  Organization of School, College and Community partnership
  Basic elements of management; Process of management in educational institutions; Resource Management in Educational Institutions; Human Resources; Physical Resources; Financial Resources; Information and learning resources (library, AV Aids and instructional resources); Policies Of Educational Institutions; Rules regarding appointment, leaves, pay and allowances; Efficiency and Discipline rules; Records Of Educational Institutions; Attendance Register; Leave Register; Stock Register; Cash Register (fee, different kind of funds); Personal files of teachers and other staff; Other academic record (students result, staff meetings et)
- Health Care Institutions (Hospitals, clinics, Healthcare Centres)
Health Organization and Management; Concept of health organization, meaning, scope and principles; Organization of health and Community partnership; Basic elements of management. Process of management; Resource Management; Human Resources; Physical Resources; Financial Resources; Information resources; Health Policies; Rules regarding appointment, leaves, pay and allowances; Efficiency and Discipline rules; Health Record; Attendance Register; Leave Register; Stock Register; Cash Register (fee, different kind of funds)

Lab Outline:

Reference Books:

HOTEL MANAGEMENT (M13- RFM)

Credit Hours: 3 Semester 8

PREREQUISITES:

Course Objectives:
- To develop understanding of issues relevant to Hotel Management and enhance skills for Hotel Management

Course Outline:
- Hotel management; The application of management theories to the hotel management;
- Business policies in hotel management; Procedures of lodging management; Management and financial activities
- Office management; Front office movement; Front office management including guest cycle; Reservations; Front office procedures
- Basic principles of quantity food production
- Food service production and service systems; Food markets; Regulation of food services; Production and distribution service of food
- Basic principles of sanitation and safety in food and beverage production
- Management of housekeeping, maintenance; management of the house keeping and the maintenance departments in lodging facilities
Lab Outline:

Reference Books:
4. Housekeeping; Management, 2nd Edition; Margaret M. Kappa HTM338; Aleta

HUMAN RESOURCE DEVELOPMENT (M14- RFM)

Credit Hours: 3 Semester 8

PREREQUISITES:

Course Objectives:
- To develop understanding of issues relevant to Human Resource Development and enhance skills for Human Resource Development.

Course Outline:
- Training Employees: Definition: The foundation for effective practice
- Training Programs & policy; Identifying training needs & objectives; Psychological Principles of Learning; Training managers & non-managerial Employees; Training providers, methods & location
- Career Development: Phases of a Career Development Programme; Career Development Program for Special Groups; Personal Career Development.
- Performance Appraisal: Purposes & uses of performance appraisal; Choosing appraisal criteria; Performance Evaluation Programmes & Methods; Process & problems of performance appraisal
- Motivating Employees to Work: Motivation: Definition & techniques of motivation; Need-want-satisfaction chain; Maslow’s hierarchy of needs; Herberg’s two-factor.

Lab Outline:

Reference Books:

**SMALL BUSINESS MANAGEMENT (E3-RFM)**

Credit Hours: 3 (2+1) Semester 8

**PREREQUISITES:**

**Course Objectives:**
- To develop understanding of issues relevant to Small Business Management and enhance skills for Small Business Management.

**Course Outline:**
- Basic Business Decisions; Defining assessing and choosing options; Lay the foundations; Market Research;
- Understanding and reaching customers
- Cost and Profit Analysis; Finances and Assets; Competitors and Constraints; Writing a business plan; Running your business; Selling techniques and business Promotion
- E-marketing and online selling; Customer Satisfaction; Price and Budgeting; Cash flow and Book-keeping; Negotiating
- Legal aspects of small business.

**Lab Outline:**
- Identify business opportunities and Make a business plan for small scale business.
- Make a plan for a small business project of 1-7 days duration; and implement and evaluate the plan.

**Reference Books:**
CONSUMER BEHAVIOUR (E3-RFM)

Credit Hours: 3 Semester 8

PREREQUISITES:

Course Objectives:
- To develop understanding related to consumer behavior

Course Outline:
- The Diversity of Consumer Behaviour. Meaning and Importance of Consumer Behaviour, Role of Consumer Research, Ethics in Marketing.
- Systems of Needs/Measurement of Motives, Motivational Research.

Lab Outline:
- NA

Reference Books:

MONEY BANKING & FINANCE (E4-RFM)

Credit Hours: 3 Semester 8

PREREQUISITES:

Course Objectives:
- To develop understanding of consumer banking

Course Outline:
- Money and its evolution Definition, Functions and characteristics of Money. Evolution of Payment system.
- Theories of Demand for Money, Quantity Theory of Money by Irving Fisher, Quantity Theory of Money by Cambridge version, Liquidity

- Monetary Policy, Meaning and Objectives of Monetary Policy, Tools and Instruments of Monetary policy, Effectiveness of Monetary Policy in Boom and Recession. Effectiveness of Monetary and Fiscal Policies in the IS-LM framework.
- Central Banking Meaning and Characteristics of Central Banks. Functions of Central Bank. Role of Central bank in Economic Development

Lab Outline:
- NA

Reference Books:

6. MAJOR & ELECTIVE COURSES FOR TEXTILE AND CLOTHING

ADVANCED TEXTILE (M1-TC)

Credit Hours 3 (2+1)Semester 5

Prerequisites

Course Objectives:
- These courses is designed for students to identify textile fibres, learn the production and performance characteristics of natural and manmade fibers, understand the importance of fabric designing and finishes and learn yarn manufacturing and production techniques

Course Outline:
- Fiber identification using technical methods: Microscopic and Chemical
- Production and performance characteristics of fibres both natural and man-made.
- Yarn classification and manufacturing: Production of yarn;
- S and Z Twist; in relation to the appearance of the fabric; Blend varieties; Effect or varying blend components in fabrics available in the market; Novelty yarn:
- Fabrics construction: Fabrics made without films and paper fabrics etc.
- Fabrics made from fibre felts; bounded fabrics, etc; Fabrics make from yarn: Braiding, netting, lacing, knitting and weaving.
- Fabrics Designing: Processes by which color and design are applied to fabric;
- Fabric finishes in relation to appearance and end use. Pressing, shirking,
- Napping, water proofing embossing, flame resistance, crease resistance.

Lab Outline:
- Fiber Analysis File
- One project based on theory

Reference Books:

PATTERN MAKING (M 2- TC)

Credit Hours 3(1+2) Semester 5
PREREQUISITES

Course Objectives:
- Understand the principles of pattern making by applying on different types of figures.
- Manipulation of darts and pleats.
- To make students understand the Importance of basic bodice block and sleeves.

Course Outline:
- Introduction to pattern making
- Measuring Techniques of the body; Equipment for measuring
Abbreviations and Symbols; Measurement chart for:-Women, Men, and Children
Drafting the body foundation: The body foundation; Equipment for drafting
The body foundation pattern; Using the body foundation.
Bodice darts and bodices:-Darts, their shapes and positioning; Bodices block.
Sleeves:-Measurement chart for sleeve patterns; The sleeve foundation pattern; Short sleeves; Three quarter length sleeve; long sleeve; Styles involving bodice and sleeve:-Saddler shoulder; Drop shoulder, Cuff
Basic Pajama trouser foundation Crotch line garments:-Crotch line chart;
Block; Foundation block for Panties; Foundation block for trousers.
Types of figures: Figure differences: Neck size; Shoulder line position

Lab Outline:
- Preparation of 6 patterns for the following groups:
- Woman,
- Children
- Man
- Stitch any one garments from the prepared patterns.
- Portfolio based on practical work.

Reference Books:
1. Rosen S. A comprehensive reference for Fashions design (July 1, 2003) Prentice Hall. USA.
FASHION DESIGNING AND ILLUSTRATIONS (M 3-TC)

Credit Hours 3 (1+2) Semester 5

PREREQUISITES

Course Objectives:
- This course is designed to enhance the creativity of the students in implementing their skills in fashion designing. It enables students to manipulate darts and pleats in fashion apparel.

Course Outline:
- Figure drawing
- Construction of figure using block form
- Proportions of ideal figure
- Fleshing out the figure
- Movement in the figure
- Dressing of the figure
- Designing with different necklines, darts, yokes and gores
- Designing Dresses with pleats
- Designing different types of sleeves, collars, coats and jackets, trousers and pants of different lengths
- Designing through source of inspiration

Lab Outline:
- Portfolio based on practical work.
- Research board
- Mood board
- Color board
- Profile board
- Development sheets of six informal and formal dresses
- Presentation sheets of two informal and formal dresses

Reference Books:
1. Fashion Illustration Flat Drawing.

TEXTILES CHEMISTRY – I (M4-TC)

Credit Hours 3 (2+1) Semester 5

PREREQUISITES

Course Objectives:
- This course is designed for students to acquire knowledge of textile chemistry.
Course Outline:
- The Chemistry of Fibers
- Polymerization
- Addition Polymers; Condensation; Crystalline Structure of Polymers; Conditions for Crystalline; Principles of packing of Polymer chain;
- Fine Structure; Orientation and Crystalline; Chain length and molecular slip; Effect of stretch on crystalline and amorphous regions;
- Properties due to crystalline and amorphous regions.
- Chemistry of Cellulose: Purification of Cellulose materials; Chemical constitution of cellulose e.g. Structures of the molecule and groups, degree of polymerization; Derivatives of Cellulose (Cellulose Esters, Cellulose Ethers, Reactivity of Hydroxyl groups); Hydrolysis of cellulose (Hydrocellulose, Rate of Attack, Determination of the degradation; viscosity method, and group analysis); Oxidation of cellulose, Attack of cellulose by alkali.

Lab Outline:
- Practical will be based on theory topics.

Reference Books:

TEXTILES COMPUTER AIDED DESIGN (TEXTILES CAD) (M5-TC)

Credit Hours 3 (1-2) Semester 6

Course Objectives:
- This course is designed to assist students in developing skills and techniques to produce computer generated graphic designs for textiles, interiors and fashion illustrations.

Course Outline:
- Introduction to CPU, keyboard and mouse.
- Graphic design and drawing software.
- Drawing basics – creating lines and curves.
- Working with graphics – shaping, altering and grouping: adding curved corners to art work
- Altering artwork
• Manipulating groups of graphics.
• Adding text to graphics: working with the fonts, adding text to artwork
• Transforming graphics into new forms:
  • Scaling images
  • Blending to add contours
  • Rotating images
  • Shearing of slanting objects uniformly
  • Shadowing objects
• Advanced modification and transformation techniques:
  • Creating exploded views
  • Cutting and adjusting
  • Multiple copies/repeating elements
  • Repeating shapes
  • Changing the axis
  • Using abstract tools
  • Using the freehand tool

**Lab Outline:**
• Develop designs using any four software:
  • Software evaluation: (latest)
  • Coral Draw
  • Adobe Photoshop
  • Adobe image editor
  • Illustrator
  • Super paint
  • Mac Draw
  • Studio Max.
• Fashion illustrations: formal wear, evening wear, children wear, men’s wear,
• Textile designs for printing, applied designs, structural designs.

**Reference Books:**

**TEXTILE CHEMISTRY – 2 (M6-TC)**
Credit Hours 3(2+1) Semester 6
PREREQUISITES

**Course Objectives:**
• This course is designed for students to acquire knowledge of textile chemistry
Course Outline:
- The Chemistry of Fibres
- Chemistry of Wool: Occurrence; Histology; Bilateral Structure; Chemical composition, Cross linkages of wool; Chemical Reactions of wool (with acids, with alkali, Treatment with water,)
- Chemistry of Silk: Occurrence, histology, chemical structure; Chemical reactions of silk with acids, alkalis and oxidizing agents.
- Chemistry of Manmade Fibres: Production of fibre, Wet spinning, Dry spinning, Melt spinning.
- Functional and Aesthetic Fabric Finishes
- Wet Processing: singing, desizing, scouring, bleaching, mercerization and caustisization.

Lab Outline:
- Practical will be based on theory topic.

Reference Books:

TEXTILE TESTING (M7-TC)
Credit Hours 3 (2+1) Semester 6

PREREQUISITES

Course Objectives:
- This course is designed to acquire basic knowledge about the fiber, yarn and fabrics dimensions and properties, and objectives of textile testing. Students will learn to analyze fabric using both qualitative and quantitative methods and test fabrics properties using various instruments.

Course Outline:
- Introduction to testing
- The selection of sample for testing
- Moisture relation and testing: The measurements of atmospheric condition; Regain Humidity relation of Textiles
- Fiber dimensions and quality
Fiber quantitative and qualitative analysis

Lab Outline:
- Testing various kinds of textiles to identify fibre, construction, dimension and durability. Practical will be based on theory topics.

Reference Books:

TEXTILES DYEING AND PRINTING (M8-TC)

Credit Hours 3 (1+2) Semester 6

PREREQUISITES

Course Objectives:
- This course is designed to acquire basic skills of developing designs for dyeing and printing manually and on CAD. Students are expected to apply dyeing and printing techniques on assorted fabrics.

Course Outline:
- Colour Theory
- Pre-Treatment of Fabrics for Dyeing and Printing.
- Printing Hand and machine methods
- Resist printing batik and shibori
- Block Printing.
- Weaving as a means of giving pattern and design.
- Dyeing of Fabrics
- Classification of Dyes – Basic dyes, acid dyes, direct dyes, napthol dyes, vat dyes.
- Properties of dyes selection of dyes, cost of dyeing
- Methods of dyeing
- Application of dyes on natural / man made /blends

Lab Outline:
- Block printing
- Crating and printing suitable designs (a minimum of Three samples)
Dyeing Techniques –
Shibori 3 Samples & 1 Project
Batik:
Use of T- Janting tool
T-Jap method
Brush method
Portfolio based on practical work.

Reference Books:

ART OF DRAPING (M10-TC)

Credit Hours 3 (1+2) Semester 7

Course Objectives:
- This course is designed to understand the principles of draping and application of draping on different types of figures. This subject will also enable students to comprehend the importance of basic bodice block, manipulation of darts & pleats. Facilitate students to understand the importance of dress forms.

Course Outline:
- Introduction to draping
- Measurement, preparation and tools for draping
- Fabric characteristics
- Draping principles and techniques
- Basic dress foundation pattern
- Manipulating dart excess
- Bodice styles in draping

Lab Outline:
- Basic blouse
- Fitted blouse (Master Pattern, Stitched with a variation)
- Blouse with ease (master pattern, stitched with lining)
- Basic darts
- Yokes without gathers and Yokes with gathers
- Straight yoke
Curved yoke
V-Yoke
Portfolio based on practical work

Reference Books:

EXPERIMENTAL TEXTILES (M11-TC)

Credit Hours 3 (2+1) Semester 7

Prerequisites

Course Objectives:
- To provide knowledge about objectives of textile testing.
- Study the qualitative and quantitative fabric analysis.
- Enabling students to acquire basic knowledge about the fibre, yarn and fabrics dimensions and properties.
- To acquaint the students with the methods of testing of fabrics using various instruments.

Course Outline:
- Yarn dimensions
- Fabric Dimensions and Properties: Fabric thickness; Count of the cloth; Crimp of yarn in fabric; Air permeability; Fabric stiffness, handle andrape; Crease resistance and crease recovery; Serviceability, wear, and abrasion resistance; Flammability; Water and fabric relationships.
- Tensile testing of Textiles: Stress-strain mechanisms of textile fibres and fabrics.

Lab Outline:
- Practical will be based on theory topics.

Reference Books:
TEXTILES AND CLOTHING INDUSTRIAL MANAGEMENT  
(Ela-TC)

Credit Hours 3 (3+0) Semester 7

PREREQUISITES

Course Objectives:
- To create an understanding of basic principles of industrial management.
- To encompass various subject matter of consumption production and its usefulness in industry.

Course Outline:
- The staff of textile mills and clothing factories (with special reference to female worker)
- The recruitment and training of Juveniles
- Problems & possible solution
- Regulations governing employment and wages
- Factories acts
- Trade union
- ISO (latest regarding industry)
- Selection. Arrangements and adoption of machinery for different types of products
- Material handling
- Maintenance routines
- Process of quality control
- Purchase and sales
- International aspect or textile import & export
- Textile & ready made garment industry o Pakistan. Its structure and organizations.
- Role of research for improving working condition and efficient output.

Lab Outline:

Reference Books:
DECORATIVE FABRICS (Elb-TC)
Credit Hours 3 (2+1) Semester 7
PREREQUISITES

Course Objectives:
- This course is designed to develop knowledge and competence in fabric embellishment.
- Enhance the creativity of students by offering opportunities to produce fabric embellishment using assorted materials and processes. To develop appreciation for quality and suitability of embellished fabrics.

Course Outline:
- Fabric Embellishment, Significance of Embellishment, Prevailing techniques of fabric embellishment.
- Different Techniques of Embellishment:
  - Sewing embellishment
  - Embroidered embellishment
  - Traditional embellishment with gold and silver
  - Beading
  - Painting
  - Smocking
  - Laces and trims
  - Quilting
  - patch work
  - 4- Market value of Embellished fabrics

Lab Outline:
- Preparation of commercial project based on above learnt techniques.

Reference Books:

ENTREPRENEURSHIP (E2a-TC)
Credit Hours 3 Semester 7
PREREQUISITES

Course Objectives:
- Upon successful completion of this course, the student will be able to:
- Assess the reciprocal relationship between certain business practices and the elements and forces that drive our free market economic system.
- Evaluate strategies for identifying, resolving and avoiding legal and ethical dilemmas in the business environment.
- Analyze the entrepreneurial process for identifying and exploiting potential business opportunities.
Course Outline:
- Introduction
- Understanding entrepreneurship
- The entrepreneurial profile
- Traits of successful entrepreneurs
- Timing and funding availability
- Common myths about entrepreneurs
- Development of business concept
- Why business planning is important
- Analyzing the project
- Defining product
- Dissecting the product
- The product life cycle
- New uses or images for old products
- Branding
- Researching the industry and the market
- Market research defined
- Defining industry
- Describing the industry
- Regional market feasibility study
- Strategic planning
- Entry strategies
- Exit strategies
- Valuation methods
- Becoming an entrepreneur
- History and future projections’ web demographics
- Benefits and limitations of going On-line
- Building a business plan for E-commerce
- E-models
- Customer relationship management
- Security and marketing
- E-commerce challenges and concerns

Lab Outline:
- Research/report writing and presentations on building a business plan and implementation prospects.

Reference Books:
1. Paul Burns and Jim Dew Hurst: Small Business and Entrepreneurship
   Publisher: Palgrave Macmillan Published: 23 Nov 2006.
2. Peter F. Drucker: Innovation and Entrepreneurship Peter F. Drucker
3. Publisher: Harper Paperbacks Published: May 9, 2006
4. The Young Entrepreneur's Guide to Starting and Running a Business by Steve Mariotti
5. Publisher: Turtleback Published: March 1, 2000
HISTORIC COSTUMES (E2 b-TC)

Credit Hours 3 (3+0) Semester 7

PREREQUISITES

Course Objectives:
- Importance of cultural significance of clothing.
- To familiarize the students with the dress of different eras.

Course Outline:
- A brief review of history of textiles in the sub-continent region.
  Evolution of textile arts through different civilizations divided into six groups. 1st group Bronze Age 3500-2500BC (in N.W.F.P, and Quetta) and Indus Valley Civilization 2500BC-1500BC
- Aryan Civilization 1500-500BC. Age of foreign invasion (covering Buddhism and Gandhara art, links with China and Central Asia) 500BC- 500AD
- Islamic and Arab influence, Turks, Mongols (8th to 15th century)
- Mughals from 15th –17th century
- British Period in India
- Post independence era. Pakistan and its four provinces Different crafts will be seen in context to different regions of Pakistan. Embroidery of Punjab, Sindh, Balochistan and N.W.F.P.
- Hand Woven textiles of Pakistan. Cotton (khaddar, Sussi, lungi, khes etc) Woolen (blankets, patti cloth, curtain cloth and Kashmiri Shawls) Silk (lungis, lachas, gulbadan, banarsi silk etc

Lab Outline:

Reference Books:

ECONOMIC, SOCIAL AND PSYCHOLOGICAL ASPECTS OF CLOTHING AND TEXTILES (E2c-TC)

Credit Hours 3(3+0) Semester 7
PREREQUISITES

Course Objectives:
- This course is designed to teach students about the history and the economic, sociological and psychological aspects of clothing and textile. Students will learn about the latest development of clothing and textile industry in Pakistan.

Course Outline:
- A study of clothing behaviour the impact of clothing on the social and psychological security of the adolescent and adult
- Interrelationship of Clothing and Culture: Patterns of culture, Relation to the material culture
- Folkways, mores and customs; Conformity and individuality in dress; Social change and fashion change
- Clothing and Human Behaviour: Clothes and the self-concept; Clothing symbolism; Clothes
- Role and Status; Conformity and individuality in Dress; Social change and Fashion change
- Clothing in the Economy: Clothing consumption patterns
- The Pakistan clothing industry; Textiles, clothing and the International Market.

Lab Outline:

Reference Books:
APPLIED TEXTILE DESIGNING (M13-TC)

Credit Hours 3 (1+2) Semester 8

PREREQUISITES

Course Objectives:
- This course is designed to acquire basic skills of developing designs for dyeing and printing manually and on CAD. Students are expected to apply dyeing and printing techniques on assorted fabrics.

Course Outline:
- Printing of fabrics
- Silk screen printing flat bed and rotary screen printing
- Discharge printing
- Direct printing
- Roller printing,
- Photographic printing
- After treatment of printed fabrics
- Development of design (both manually and on CAD)
- Research board
- Mood board
- Colour palette
- Product presentations

Lab Outline:
- Development of textile designs for apparel and upholstery (both manually and on CAD).
- Screen printing
- Creating manual and computer aided designs for apparel and upholstery
- Portfolio based on practical work.

Reference Books:

DRESS DESIGNING THROUGH DRAPING (M14-TC)

Credit Hours 3 (1+2) Semester 8

PREREQUISITES

Course Objectives:
- To enable the students to understand the fitting rules, principles and their effects upon garments.
Course Outline:
- Draping Qameez (or its variations) on the dress from
- Drafting and flat-pattern designing of basic set in sleeves
- Designing set in sleeves from the master pattern. One piece sleeve block
- Sleeves cut in one with the bodies or a part of the bodice.
- Fitting
- General principles of fitting
- Preparation of the master pattern for fitting
- Fitting problems of the blouse or qameez
- Fitting problems of the sleeve, collars and necklines – Through draping).

Lab Outline:
- Draped skirts and skirt style-lines, Draped collars, Draped buildup necklines: Cowls, Facings.
- Dress foundations and designs, Strapless dress foundations and designs, Principle of contour draping, Bias cut dresses, Bodice sleeve combination dresses, One piece shirts and blouses.
- Jackets and coats
- Source of inspiration in design, Developing designs, Studying the fabric, Draping with muslin for details of design, Interpreting silhouette as complete design, Developing design theme from variations of basic darts, Carrying one piece of fabric as far as possible without cutting.
- Portfolio based on practical work.

Reference Books:

TEXTILE MARKETING AND MERCHANDISING (E3a-TC)

Credit Hours 3 (3+0) Semester 8
PREREQUISITES

Course Objectives:
- To make students to understand the Importance of marketing and merchandizing policies with special reference to textile industry of Pakistan.
- Role of advertisement in promotion of textile merchandizing.
• To understand the problems faced by the manufacturers regarding consumers demand.

Course Outline:
• Management: Scope of management; Management hierarchy; Management aids; Management Organization
• Merchandizing: Definition and importance of merchandizing; Concept of durability, style, attractiveness, comfort & general marketing.
• Problems faced by the manufacturers to meet specifications of consumers and vice versa.
• Research and Development: Scope of research and Development; Research requirements of a company; Research associations.
• Marketing: Definition and scope; The societal marketing concepts; Functions and policies related to textile industry of Pakistan
• Role of advertisements in promotion of textile merchandize.

Lab Outline:

Reference Books:
2. Cynthia L. Regan; Apparel Product Design and Merchandising Strategic; Prentic Hall; 1st Ed. 2007.
4. Dorothy D. Prisco, Fashion Merchandise to information 1986, Willey Publisher.

STRUCTURAL TEXTILE DESIGNING (E3b-TC)

Credit hours 3 (1-2) Semester 8

Course Objectives:

Course Outline:
• Introduction to Fabric formation: Methods of fabric formation, Weaving and woven fabrics, History of weaving, Weaving machines, Woven fabrics
• Woven fabric design and construction, Fabric construction
• Basic weaves, Drawing in draft, The reed plan, Cam draft or chain draft, Warp and filling profiles
• Basic weave designs: Plain weave, Twill weave, Satin weave and their derivatives
Weaving preparation, Winding, Warp preparation, Slashing (sizing), Drawing in and ‘tying in’.
Weaving fundamentals, Basic weaving motions, Shedding systems, Shuttle weaving, Jet weaving, Projectile weaving, rapier weaving, multiple weaving.
Fabric structure, properties and testing.

Lab Outline:
- Portfolio based on theory

Reference Books:

FASHION PHOTOGRAPHY (E3c-TC)
Credit hour 3 (1-2) Semester 8

Course Objectives:
Upon successful completion of this course, the student will be able to:
- Expose and develop his/her coloured negatives and be able to make prints from those negatives.
- Demonstrate an understanding of the basic elements of photographic composition and the relationship of light to photographic aesthetics in relation to fashion modeling
- Describe and evaluate photographs with special emphasis on fashion photography.

Course Outline:
- Camera Operation and Film Development: Basic Exposure, The Lens, The Shutter, Basic Methods of Exposure
- Advance Printing and Mounting: Contact Sheets, Enlarging, Contrast Control, Burning and Dodging. Mounting the Print
- Spotting
- Nature of Light for fashion photography, Type and quality of light, Light modulators, Hard edge-soft edge, Exposure controls (negative), Flash
- Nature of Space for fashion photography: Object - as related to space and background
- Line - convergence - vanishing point - perspective without the use of the horizon
- Lenses as they pertain to scale change within the frame
- Surface texture and visual contrast as a function of distance
Emptiness, Interval, Juxtaposition, Compositions, Alternative Techniques, High Contrast, Negative Prints, Sandwiching Negatives, Constructing Photographs
Portfolio Design, Creatively conceptualizing a consistent body of work, Consistency in idea, Consistency in idea and image, Presenting photographs and photographic materials, Evaluation / Critiques

Lab Outline:
- Portfolio based on practical work.

Reference Books:
1. Digital Fashion Photography by Chris (Chris Tarantino) Tarantino Publisher: Course Technology PTR; 001 edition (July 8, 2005).

FASHION AND BOUTIQUE MANAGEMENT (E4a-TC)

Credit hours 3 (2+1) Semester 8

Course Objectives:
Upon successful completion of this course, the student will be able to:
- Demonstrate skills necessary to create effective contemporary displays and fashion shows.
- Explore new trends in visual merchandising and capable of researching ideas.
- Develop and demonstrate critical thinking skills in evaluating and executing displays.
- Identify and apply the principles and elements of design in fashion shows and window displays.

Course Outline:
- Introduction to fashion, Fundamental of fashion, concept, terminology and forecast.
- Types of fashion: Haute Couture, Ready to wear
- Introduction to Contemporary Visual Merchandising
- Introduction to marketing
- Product definition and life cycle
- Analyzing consumer buying habits and finding marketing “gaps”
- Inventory purchasing, Inventory control, pricing
- Location and marketing
• Promotional budgets (methods of evaluation), In-store display, Personal selling, advertising
• Display Accessories and Tool Box
• Developing a Design and Budget
• Taking Down Fashion Show and Store Displays
• Evaluation with Store Owner/Manager/supervisor

Lab Outline:
• Setting Up Store Display With Help from Other Students (group activity).

Reference Books:
5. Applied Visual Merchandising (3rd Edition) [Hardcover]

FUNCTIONAL DESIGNING FOR SPECIAL PEOPLE (E4b-TC)

Credit Hours: 3 (2+1) Semester 8
PREREQUISITES

Course Objectives:
• To understand special recruitment for physically restricted people.
• To develop functional feature according to physical restriction requirements.

Course Outline:
• Understanding the requirements of physical restriction
• Understanding the requirement of functional and ease features in dress designing for special people
• Dress designing with special features for crutch users, wheel chair users, people with Amputee arms, people with Amputee legs, person suffering from various level of cerebral palsy, person suffering from arthritics, and for blind person.
• Health safety and comfort requirement for special people.
• Methods of measuring body dimension
• Importance of designing functional features for physical restricted individuals.
- Crutch users, Wheel chair users, Amputee arms, Amputee legs, Cerebral palsy, Arthritis, Blindness, Understanding psychological requirements for physically restricted people

**Lab Outline:**
- Dress designing for physically restricted people
- Development of dress pattern with special functional feature for any two types of physical restriction
- Construction of one dress with the help of the developed pattern.

**References Books:**

**HOME ECONOMICS RESEARCH JOURNALS**

**GENRAL HOME ECONOMICS:**

Brazilian Journal Of Home Economics
http://www.revistaokos.ufv.br/html/
Canadian Home Economics Journal
http://www.chef-fcef.ca/journal/index.htm
Carribean Journal Of Home Economics
http://caribbeanhomeeconomist.org/publications/journals/
Consumer Sciences Today
http://www.institute-consumer-sciences.co.uk/cst.html
Family And Consumer Sciences Research Journal
http://fcs.sagepub.com/
Home Care Provider
Human Ecology Review
http://www.humanecologyreview.org/
Huw - Hauswirtschaft Und Wissenschaft (Home Economics and Science)
International Journal Of Consumer Studies
http://www.wiley.com/bw/journal.asp?ref=1470-6423&site=1
International Journal Of Human Ecology
http://www.khea.or.kr/eng/IJHE-0.html
Journal Of Consumer Culture
http://joc.sagepub.com/
Journal Of Family Ecology And Consumer Sciences
http://www.up.ac.za/saafecs
Journal Of Home Economics (1909 Until 1993)
http://hearth.library.cornell.edu/h/hearth/browse/title/4732504.html#1980
Journal Of Human Ecology
www.krepublishers.com/...Journals/.../JHE-00-0-000-000-1990-1-Cover.htm
Journal Of The Home Economics Institute Of Australia
Kappa Omicron Nu Forum - Publication Archive
Korea Consumer Agency - Korea Consumer Newsletter
http://www.cpb.or.kr/front/english/info_01.jsp
Nurture - Journal Of Pakistan Home Economics Association
www.chek.edu.pk/indexnurture
Rhw Management - Rationelle Hauswirtschaft
http://www.rationelle-hauswirtschaft.de/
The Journal Of Asian Regional Association For Home Economics (ARAH)
The Journal Of Home Economics Of Japan
http://www.jstage.jst.go.jp/browse/jhej
http://www.khea.or.kr/eng/IJHE-0.html
THESA - Teachers Of Home Economics Specialist Association
http://bctf.ca/THESA/

ART AND DESIGN
Color Research And Application
http://www.blackwellpublishing.com/journal.asp?ref=0361-2317&site=1
Creative Quarterly
http://www.cqjournal.com/
The International Journal Of Art & Design Education
http://www.wiley.com/bw/journal.asp?ref=1476-8062
Visual Arts Research
http://www.press.uillinois.edu/journals/var.html
Aktuelle Ernährungsmedizin - Journal For Metabolic Research, Clinical Nutrition And Dietetics
http://www.thieme.de/akternmed/
American Journal Of Clinical Nutrition
http://www.ajcn.org/
Annual Review Of Nutrition
http://arjournals.annualreviews.org/loi/nutr?cookieSet=1
Appetite
http://www.sciencedirect.com/science/journal/01956663
Asia Pacific Journal Of Clinical Nutrition
http://apjcn.nhri.org.tw/
British Journal Of Nutrition
http://journals.cambridge.org/action/displayJournal?jid=bjn
Ernährung Im Focus
http://www.aid.de/fachzeitschriften/eif/eif.php
European Journal Of Clinical Nutrition
http://www.nature.com/ejcn/index.html
European Journal Of Nutrition
http://www.springer.com/steinkopff/journal/394
Family Economics And Nutrition Review
Food Service Technology
http://www.wiley.com/bw/journal.asp?ref=1748-0140&site=1
Food/Nahrung
http://www.wiley-vch.de/publish/dt/journals/alphabeticIndex/7716/?sID=ivdiqnjb2evjmsk58070l55631
Journal of the American Dietetic Association
http://www.adajournal.org/
Journal Of Human Nutrition And Dietetics
http://www.wiley.com/bw/journal.asp?ref=0952-3871&site=1
Journal Of Nutrition Education & Behavior
http://www.jneb.org/
Nutrition - The International Journal Of Applied And Basic Nutritional Sciences
http://www.elsevier.com/wps/find/journaldescription.cws_home/525614/description#description
Nutrition Bulletin
http://www.wiley.com/bw/journal.asp?ref=1471-9827&site=1
Nutrition Research - The International Medium For Rapid Publication Of Communications In The Nutritional Sciences
http://www.elsevier.com/wps/find/journaldescription.cws_home/525483/description#description
Pakistan Journal Of Nutrition
www.pjbs.org/pjnonline/index.htm
Skandinavian Journal Of Nutrition
HUMAN DEVELOPMENT
Australian Journal Of Rural Health
http://www.wiley.com/bw/journal.asp?ref=1038-5282&amp;site=1
Child & Family Social Work
http://www.wiley.com/bw/journal.asp?ref=1356-7500
Child Development
http://www.wiley.com/bw/journal.asp?ref=0009-3920
Families International
http://www.viennafamilycommittee.org/
Family & Community Health: The Journal Of Health Promotion & Maintenance
http://journals.lww.com/familyandcommunityhealth/pages/default.aspx
Family Practise
http://fampra.oupjournals.org/
Family Process
http://www.familyprocess.org/
Family Relations/National Council On Family Relations
http://www.wiley.com/bw/journal.asp?ref=0197-6664&amp;site=1
Family Relations: Interdisciplinary Journal Of Applied Family Studies
http://www.ncfr.org/journals/family_relations/home.asp
Family Science Review
http://www.familyscienceassociation.org/FSR142009.php
Family, Systems & Health
Gender, Work And Organization
http://www.wiley.com/bw/journal.asp?ref=0968-6673&amp;site=1
Geriatric Nursing
http://www.gnjournal.com/
Geriatrics And Gerontology International
http://www.wiley.com/bw/journal.asp?ref=1444-1586&amp;site=1
Health And Social Care In The Community
http://www.wiley.com/bw/journal.asp?ref=0966-0410&amp;site=1
International Family Studies - Developing Curricula And Teaching Tools
http://www.routledgenursing.com/books/International-Family-Studies-isbn9780789029249
International Journal Of Law, Policy And The Family
http://lawfam.oxfordjournals.org/
International Journal Of Life Cycle Assessment
http://www.springer.com/environment/journal/11367
International Journal Of Sociology Of The Family
http://www.yorku.ca/irjs/
JHQ - Journal For Healthcare Quality
http://www.wiley.com/bw/journal.asp?ref=1062-2551&amp;site=1
Journal of Adolescence
RESOURCES AND FACILITY MANAGEMENT

Advances In Consumer Research
http://www.acrwebsite.org/volumes/

Ccn (Consumer Citizenship Network)
http://www.hihm.no/concit/

Der Facility-Manager (I)
http://www.facility-manager.de/adwords/dfm.php?gclid=CJjImpnhJwCFcgSzAodOgIaQ

Family Economics News

Family Resource Management
http://www.uk.sagepub.com/booksProdDesc.nav?prodId=Book228870&currTree=Subj

Health & Consumer Voice: Newsletter On Food Safety, Health And Consumer Policy/European Commission
http://ec.europa.eu/dgs/health_consumer/dyna/consumervoice/consumervoice.cfm

Home Health Care Management & Practice
http://hhc.sagepub.com/

Huishoudstudies: Tijdschrift Voor Huishoud - En Consumentenvraagstukken En Facilitair Management
http://library.wur.nl/consumer/tvh.html

International Journal Of Consumer Studies
http://www.wiley.com/bw/journal.asp?ref=1470-6423&site=1

International Social Science Journal
http://www.wiley.com/bw/journal.asp?ref=0020-8701&site=1

Journal Of Consumer Behaviour
http://www3.interscience.wiley.com/journal/110483937/home

Journal Of Consumer Culture
http://joc.sagepub.com/

Journal Of Consumer Marketing
http://www.emeraldinsight.com/info/journals/jcm/jourinfo.jsp

Journal Of Consumer Policy
http://www.springer.com/sgw/cda/frontpage/0,,4-10017-70-35644567-0,00.html

Journal Of Consumer Psychology
http://www.elsevier.com/wps/find/journalbibliographicinfo.cws_home/713950/description#bibliographicinfo
Journal Of Consumer Research
http://www.journals.uchicago.edu/toc/jcr/current
Journal Of Consumer Studies And Home Economics
http://www.ingentaconnect.com/content/bsc/jcshe
Journal Of Family & Consumer Sciences
Journal Of Family And Consumer Sciences Education
http://www.natefacs.org/JFCSE/jfcse.htm
Journal Of Family And Economics Issues
http://www.springer.com/west/home/psychology?SGWID=4-10126-70-35547836-0
Journal Of Financial Counseling And Planning
http://www.afcpe.org/publications/
Journal Of Research For Consumers
http://www.jrconsumers.com/
Journal For Family Ecology And Consumer Sciences
http://www.up.ac.za/saafecs
Malaysian Journal Of Consumer And Family Economics
http://www.scimagojr.com/journalsearch.php?q=19700176606&tip=sid&clean=0
Practice Oriented Quality Management For Non-Profit-Organisations (S - P)
http://shop.strato.de/epages/61404068.sf/de_DE/?ObjectPath=/Shops/61404068/Products/978-3-937346-43-4
Qualitätsmanagement In Klinik Und Praxis
http://www.pmi-verlag.de/index.php?sub=zeit&amp;id=10
Review Of Development Economics
http://www.wiley.com/bw/journal.asp?ref=1363-6669&amp;site=1
Review Of Economics Of The Household
http://www.springerlink.com/content/109451/
Review Of Economics Of The Household
http://www.kluweronline.com/issn/1569-5239
Review Of Income And Wealth
http://www.wiley.com/bw/journal.asp?ref=0034-6586&amp;site=1
The Journal Of Consumer Affairs
http://www.blackwellpublishing.com/journal.asp?ref=0022-0078
The Journal Of Consumer Education
http://www.cefe.illinois.edu/JCE/
The Journal Of Sustainability Education (JSE)
http://www.journalofsustainabilityeducation.org/wordpress/

TEXTILES AND CLOTHING
Clothing And Textiles Research Journal
http://ctr.sagepub.com/
International Textile And Apparel Association
http://www.itaaonline.org/
Pakistan Textile Journal
Research Journal Of Textile And Apparel
http://www.rjta.org/about_aim.php
Textile Research Journal
http://trj.sagepub.com/
The Costume Research Journal
http://www.costumes.org/computer/crj/1index.htm

JOURNALS RELATED TO HOME ECONOMICS OBJECTIVES
Annual Review Of Public Health
http://arjournals.annualreviews.org/loi/publhealth
Berufsbildung In Wissenschaft Und Praxis (Vocational Training in Research and Practice)
http://www.bibb.de/de/32108.htm
Curriculum Leadership
http://cmslive.curriculum.edu.au/leader/about_this_site,63.html
European Journal Of Education
http://www.wiley.com/bw/journal.asp?ref=0141-8211
International Journal For Quality In Health Care
http://intqhc.oupjournals.org/
Journal Of Public Health
http://pubmed.oupjournals.org/
Learning In Health And Social Care
The European Journal Of Public Health
http://www3.oup.co.uk/eurpub/

Websites of Home Economics Organizations / Institutions

AFRICA
Nigeria
Home Science Association
(http://www.homescienceassociation.org/)

South Africa
WSU Walter Sisulu University
(http://www.wsu.ac.za/)

Swaziland
University of Swaziland
(http://www.uniswa.sz/)

ASIA
ARAHE - Asian Regional Association for Home Economics
(http://arahe-web.com/)
Hong Kong
HKHEA - Hong Kong Home Economics Association
Pakistan Home Economics Association
(Pakistan Home Economics Association
(http://www.hkhea.org/)

Japan
JAHEE - The Japan Association of Home Economics Education
(http://wwwsoc.nii.ac.jp/jjhee/index.html)
JSHE - The Japan Society of Home Economics
(http://wwwsoc.nii.ac.jp/jshe/english/)

Korea
KHEA - The Korean Home Economics Association
(http://www.khea.or.kr/eng/Home.html)
Yonsei University - College of Human Ecology
(http://che.yonsei.ac.kr/eng/)

Philippines
PHEA - Philippine Home Economics Association
(http://sirpats.com/phea/main/)

Singapore
Association of Home Economists Singapore
(http://www.ahes.org/)

Thailand
Sukhotai Thammathirat Open University - School of Human Ecology
(http://www.stou.ac.th/Eng/)
Ministry of Agriculture & Cooperatives - Department of Ag. Extension
(Home Economics Section)
(http://www.moac.go.th/builder/moac/eng/index.htm)

EUROPE
Denmark
The Danish University of Education, Department of Curriculum Research
(http://www.dpu.dk/)
Hjemkundskabslärerforeningen - Association for Home Economics Teachers
(http://www.hjemkundskab.nu/)

Finland
Kotitalousopetajien Liitto Hushallslääamasförbund RY - Federation of Home Economics Teacher
(http://www.kotitalous.org/liitto/english.htm)
Kuluttajaekonomistit La Teknologit Ry. COTES/COTES - The Society for Consumer Economists and Technologists
(http://www.agronomiliitto.fi/yhdistykset/cotes/index.php?y=3&m=8&id=1234&sm=588)
Kuluttajatutkimuskeskus - National Consumer Research Centre
(http://www.ncrc.fi/en/)
The Martha Organization
(http://www.martat.fi/in_english/)
Germany
BHF - Berufsverband Hauswirtschaft e.V.
(http://www.berufsverband-hauswirtschaft.de/)
BMELV - Bundesministerium für Ernährung, Landwirtschaft und
Verbraucherschutz
(http://www.bmelv.de/)
dgh - Deutsche Gesellschaft für Hauswirtschaft e.V.
(http://www.dghev.de/)
DHB - Netzwerk Haushalt - Berufsverband der Haushaltsführenden
(http://www.dhb-netzwerk-haushalt.de/)
DLV - Deutscher LandFrauenverband e.V.
(http://www.dlv-online.de/)
HaBiFo - Haushalt in Bildung und Forschung e.V.
(http://www.habifo.de/)
MdH - Bundesverband hauswirtschaftlicher Berufe MdH e.V.
(http://www.verband-mdh.de/)
VDOE - Verband der Oecotrophologen e.V.
(http://www.vdoe.de/)
vlb - Verband der Lehr- und Beratungskräfte für Haushalt und Verbrauch im
ländlichen Raum e.V.
(http://www.vlbnet.de/)
Nestlé Deutschland AG
(http://www.nestle.de/)

Greece
Ministry for Rural Development and Food, Directorate of Rural
Extension/Home Economics

Ireland
ATHE - Association of Teachers of Home Economics
(http://athe-ireland.com/athe/)
CDVEC
(Curriculum Development Unit Ireland), Dublin
(http://www.cdvec.ie/)
HEIB - Home Economists in Business Ireland
(http://www.stcatherinespsu.com/Home%20Economics.html)
CCEA - Northern Ireland Council for the Curriculum Examination and Assessment
(http://www.ccea.org.uk/)
St. Angela’s - College of Education/Home Economics
(http://www.stacs.edu.ie/)
St. Catherine’s College - Past Students Union
(http://www.stcatherinespsu.com/)

**Malta**
(HEiA) Home Economists in Action
(http://www.wix.com/heiamalta/home)
Consumers’ Association Malta
(http://www.camalta.org/)
Netherlands
Wageningen University and Research Center
(http://www.wur.nl/uk/)
KLV - Kring Consumentenstudies
(https://www.klv.nl/en/Pages/home.aspx)

**Norway**
Utdanningsforbundet
(http://www.utdanningsforbundet.no/)
Landslaget for Laerere Heimkunnskap - National Association for Home Economics Teachers
(http://utdanning.no/laering/vis.php?pid=uno:skolenettet_no_29363)

**Slovenia**
University of Ljubljana - Faculty of Education
(http://www.adults-mentoring.eu/?pid=14)

**Spain**
INSEDNetwork
(International Network for Service Enterprise and Education Development)
(http://www.insednetwork.org/en/)

**Sweden**
Lärarförbundet - Swedisch Teachers' Union
Swedish Committee for Home Economics - Svenska kommittén för hushållsvetenskap
(http://www.skhv.org/)
Högskolan Kristianstad - Sektionen för hälsa och samhälle - School of Health and Society
University of Gothenburg - Department of Food, Health and Environment
(http://www.mhm.gu.se/)
University of Gothenburg - Department of Home Economics
(http://www.gu.se/english/)
Umea University - Department of Food and Nutrition
(http://www.kost.umu.se/english/?languageId=1)

**Switzerland**
Facility Management Schweiz, Hauswirtschaft und Gastronomie
(http://www.fmschweiz.ch/)
Oda Hauswirtschaft Schweiz - Economie Familiale Suisse
(http://www.hauswirtschaft.ch/)
Hochschule Wädenswil - Institute of Facility Management
(http://www.ifm.zhaw.ch/en/lsfm/ifm.html)

United Kingdom
Council for the Curriculum Examinations and Assessment
(http://www.ccea.org.uk/)
DATA - The Design & Technology Association
(http://www.data.org.uk/)
Birmingham College of Food, Tourism and Creative Studies
(http://www.bcfcts.ac.uk/)
Liverpool John Moores University - School of Education and Community Studies
(http://www.livjm.ac.uk/)
Whisk - a fresh approach to Home Economics
(http://www.whisk.biz/)

Australia
HEIA Inc. - Home Economics Institute of Australia Inc.
(http://www.heia.com.au/)
HEIA
(Qld) Inc. - Home Economics Institute of Australia - Queensland Division Inc.
(http://www.heia.com.au/heiaq/)
world family organization
(http://www.worldfamilyorganization.org/)

AMERICAS
Canada
AHEA - Alberta Human Ecology and Home Economics Association
(http://www.ahea.ab.ca/)
MAHE - Manitoba Association of Home Economists
(http://www.mahe.ca/)
NBHEA - New Brunswick Home Economics Association
(http://personal.nbnet.nb.ca/dosat/english.htm)
OFSHEAA - Ontario Family Studies Home Economics Educators' Association
(http://www.ofsheea.ca/)
OHEA - Ontario Home Economics Association
(http://www.ohea.on.ca/)
Brescia University College
(https://www.uwo.ca/brescia/)

Caribbean
CAHE - Caribbean Association of Home Economists Inc.
(http://www.caribbeanhomeeconomist.org/)

USA
IFHE-US - International Federation for Home Economics-US
(http://www.ifhe-us.org/)
AAFS - American Association of Family and Consumer Sciences
Alabama Association of Family & Consumer Sciences
California Association of Family & Consumer Sciences
FAFCS - Florida Association of Family & Consumer Sciences
IAFS - Illinois Association of Family & Consumer Sciences
INAFCS - Indiana Association of Family & Consumer Sciences
MAFCS - Minnesota Association of Family & Consumer Sciences
New York State AFCS - New York State Association of Family & Consumer Sciences
OAFCS - Ohio Association of Family & Consumer Sciences
SCAFCS - South Carolina Association of Family & Consumer Sciences
VAFCS - Virginia Association of Family & Consumer Sciences
WAFCS - Washington Association of Family and Consumer Sciences
West Virginia Association of Family & Consumer Sciences
Wisconsin Association of Family & Consumer Sciences
American Cleaning Institute - Washington, DC, formerly Soap & Detergent Association
Iowa State University - College of Human Sciences
University of Arkansas - School of Human Environmental Sciences
University of Georgia - College of Family and Consumer Sciences
University of Minnesota
Texas Tech University - College of Human Sciences
The Ohio State University - College of Education & Human Ecology
Virginia Tech - Department of Human Nutrition, Foods & Exercise
Washington State University - College of Agricultural, and Natural Resource Sciences/Academic Programs
(http://cahe.wsu.edu/)
Council of Administrators of Family & Consumer Sciences
(http://www.cafcs.org/)
Annexure “A”

COMPULSORY COURSES IN ENGLISH FOR BS
(4 YEAR) IN BASIC & SOCIAL SCIENCES

English I (Functional English)

Objectives: Enhance language skills and develop critical thinking.

Course Contents
Basics of Grammar
Parts of speech and use of articles
Sentence structure, active and passive voice
Practice in unified sentence
Analysis of phrase, clause and sentence structure
Transitive and intransitive verbs
Punctuation and spelling

Comprehension
Answers to questions on a given text

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

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

Translation skills
Urdu to English

Paragraph writing
Topics to be chosen at the discretion of the teacher

Presentation skills
Introduction

Note: Extensive reading is required for vocabulary building

Recommended books:
1. Functional English
   a) Grammar
b) Writing

c) Reading/Comprehension

d) Speaking

   **English II (Communication Skills)**

   **Objectives:** Enable the students to meet their real life communication needs.

   **Course Contents:**

   - **Paragraph writing**
     Practice in writing a good, unified and coherent paragraph

   - **Essay writing**
     Introduction

   - **CV and job application**
     Translation skills
     Urdu to English

   - **Study skills**
     Skimming and scanning, intensive and extensive, and speed reading, summary and précis writing and comprehension

   - **Academic skills**
     Letter/memo writing, minutes of meetings, use of library and internet

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

   *Note: documentaries to be shown for discussion and review*

   **Recommended books:**

   **Communication Skills**

   a) Grammar
b) Writing

c) Reading
2. Reading and Study Skills by John Langan

English III (Technical Writing and Presentation Skills)

Objectives: Enhance language skills and develop critical thinking

Course Contents:

- Presentation skills
- Essay writing
  Descriptive, narrative, discursive, argumentative
- Academic writing
  How to write a proposal for research paper/term paper

How to write a research paper/term paper (emphasis on style, content, language, form, clarity, consistency)

- Technical Report writing
- Progress report writing

Note: Extensive reading is required for vocabulary building

Recommended books:

Technical Writing and Presentation Skills

a) Essay Writing and Academic Writing

b) Presentation Skills
c) Reading
The Mercury Reader. A Custom Publication. Compiled by norther Illinois University. General Editors: Janice Neulib; Kathleen Shine Cain; Stephen Ruffus and Maurice Scharton. (A reader which will give students exposure to the best of twentieth century literature, without taxing the taste of engineering students).
Pakistan Studies (Compulsory)

Introduction/Objectives:
- Develop vision of historical perspective, government, politics, contemporary Pakistan, ideological background of Pakistan.
- Study the process of governance, national development, issues arising in the modern age and posing challenges to Pakistan.

Course Outline
1. **Historical Perspective**
   b. Factors leading to Muslim separatism
   c. People and Land
      i. Indus Civilization
      ii. Muslim advent
      iii. Location and geo-physical features.

2. **Government and Politics in Pakistan**
   Political and constitutional phases:
   a. 1947-58
   b. 1958-71
   c. 1971-77
   d. 1977-88
   e. 1988-99
   f. 1999 onward

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

Books Recommended:
Annexure “C”

ISLAMIC STUDIES
(Compulsory)

Objectives:

This course is aimed at:
1. To provide basic information about Islamic Studies
2. To enhance understanding of the students regarding Islamic Civilization
3. To improve students’ skill to perform prayers and other worships
4. To enhance the skill of the students for understanding of issues related to faith and religious life.

Detail of Courses:

Introduction to Quranic Studies

1) Basic Concepts of Quran
2) History of Quran
3) Uloom-ul -Quran

Study of Selected Text of Holy Quran

1) Verses of Surah Al-Baqra Related to Faith (Verse No-284-286)
2) Verses of Surah Al-Hujrat Related to Adab Al-Nabi (Verse No-1-18)
3) Verses of Surah Al-Mumanoon Related to Characteristics of faithful (Verse No-1-11)
4) Verses of Surah al-Furqan Related to Social Ethics (Verse No.63-77)
5) Verses of Surah Al-Inam Related to Ihkam (Verse No-152-154)

Study of Selected Text of Holy Quran

1) Verses of Surah Al-Ihzab Related to Adab al-Nabi (Verse No.6,21,40,56,57,58.)
2) Verses of Surah Al-Hashar (18,19,20) Related to thinking, Day of Judgment
3) Verses of Surah Al-Saf Related to Tafakar, Tadabar (Verse No-1,14)

Seerat of Holy Prophet (SAW) I

1) Life of Muhammad Bin Abdullah (Before Prophet Hood)
2) Life of Holy Prophet (SAW) in Makkah
3) Important Lessons Derived from the life of Holy Prophet in Makkah

Seerat of Holy Prophet (SAW) II

1) Life of Holy Prophet (SAW) in Madina
2) Important Events of Life Holy Prophet in Madina
3) Important Lessons Derived from the life of Holy Prophet in Madina
Introduction To Sunnah
1) Basic Concepts of Hadith
2) History of Hadith
3) Kinds of Hadith
4) Uloom –ul-Hadith
5) Sunnah & Hadith
6) Legal Position of Sunnah

Selected Study from Text of Hadith

Introduction To Islamic Law & Jurisprudence
1) Basic Concepts of Islamic Law & Jurisprudence
2) History & Importance of Islamic Law & Jurisprudence
3) Sources of Islamic Law & Jurisprudence
4) Nature of Differences in Islamic Law
5) Islam and Sectarianism

Islamic Culture & Civilization
1) Basic Concepts of Islamic Culture & Civilization
2) Historical Development of Islamic Culture & Civilization
3) Characteristics of Islamic Culture & Civilization
4) Islamic Culture & Civilization and Contemporary Issues

Islam & Science
1) Basic Concepts of Islam & Science
2) Contributions of Muslims in the Development of Science
3) Quranic & Science

Islamic Economic System
1) Basic Concepts of Islamic Economic System
2) Means of Distribution of wealth in Islamic Economics
3) Islamic Concept of Riba
4) Islamic Ways of Trade & Commerce

Political System of Islam
1) Basic Concepts of Islamic Political System
2) Islamic Concept of Sovereignty
3) Basic Institutions of Govt. in Islam

Islamic History
1) Period of Khlaft-e-Rashida
2) Period of Ummayyads
3) Period of Abbasids

Social System of Islam
1) Basic Concepts Of Social System Of Islam
2) Elements Of Family
3) Ethical Values Of Islam
Reference Books:

1) Hameed ullah Muhammad, “Emergence of Islam”, IRI, Islamabad.
2) Hameed ullah Muhammad, “Muslim Conduct of State”.
3) Hameed ullah Muhammad, ‘Introduction to Islam.
4) Mulana Muhammad Yousaf Islahi,”.
ANNEXURE “D”

Note: One course will be selected from the following six courses of Mathematics.

COMPULSORY MATHEMATICS COURSES FOR BS (4-YEAR)

(FOR STUDENTS NOT MAJORING IN MATHEMATICS)

1. MATHEMATICS I (ALGEBRA)

PREREQUISITE(S): Mathematics at secondary level

Credit Hours: 3 + 0

Specific Objectives of the Course: To prepare the students, not majoring in mathematics, with the essential tools of algebra to apply the concepts and the techniques in their respective disciplines.

Course Outline:

Preliminaries: Real-number system, complex numbers, introduction to sets, set operations, functions, types of functions.

Matrices: Introduction to matrices, types, matrix inverse, determinants, system of linear equations, Cramer’s rule.

Quadratic Equations: Solution of quadratic equations, qualitative analysis of roots of a quadratic equations, equations reducible to quadratic equations, cube roots of unity, relation between roots and coefficients of quadratic equations.

Sequences and Series: Arithmetic progression, geometric progression, harmonic progression.

Binomial Theorem: Introduction to mathematical induction, binomial theorem with rational and irrational indices.

Trigonometry: Fundamentals of trigonometry, trigonometric identities.

Recommended Books:


2. MATHEMATICS II (CALCULUS)

PREREQUISITE(S): Mathematics I (Algebra)

Credit Hours: 3 + 0

Specific Objectives of the Course: To prepare the students, not majoring in mathematics, with the essential tools of calculus to apply the concepts and the techniques in their respective disciplines.

Course Outline:

Preliminaries: Real-number line, functions and their graphs, solution of equations involving absolute values, inequalities.

Limits and Continuity: Limit of a function, left-hand and right-hand limits, continuity, continuous functions.

Derivatives and their Applications: Differentiable functions, differentiation of polynomial, rational and transcendental functions, derivatives.

Integration and Definite Integrals: Techniques of evaluating indefinite integrals, integration by substitution, integration by parts, change of variables in indefinite integrals.

Recommended Books:
Thomas GB, Finney AR, Calculus (11th edition), 2005, Addison-Wesley, Reading, Ma, USA.

3. MATHEMATICS III (GEOMETRY)

PREREQUISITE(S): Mathematics II (Calculus)

Credit Hours: 3 + 0

Specific Objectives of the Course: To prepare the students, not majoring in mathematics, with the essential tools of geometry to apply the concepts and the techniques in their respective disciplines.

Course Outline:

Geometry in Two Dimensions: Cartesian-coördinate mesh, slope of a line, equation of a line, parallel and perpendicular lines, various forms of equation of a line, intersection of two lines, angle between two lines, distance between two points, distance between a point and a line.

Circle: Equation of a circle, circles determined by various conditions, intersection of lines and circles, locus of a point in various conditions.
**Conic Sections:** Parabola, ellipse, hyperbola, the general-second-degree equation

**Recommended Books:**

4. **COURSE FOR NON-MATHEMATICS MAJORS IN SOCIAL SCIENCES**

<table>
<thead>
<tr>
<th>Title of subject:</th>
<th>MATHEMATICS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discipline</strong></td>
<td>BS (Social Sciences).</td>
</tr>
<tr>
<td><strong>Pre-requisites</strong></td>
<td>SSC (Metric) level Mathematics</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td>03 + 00</td>
</tr>
<tr>
<td><strong>Minimum Contact Hours:</strong></td>
<td>40</td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td>written examination;</td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td>2008 and onward</td>
</tr>
</tbody>
</table>

**Aims**: To give the basic knowledge of Mathematics and prepare the students not majoring in mathematics.

**Objectives**: After completion of this course the student should be able to:
- Understand the use of the essential tools of basic mathematics;
- Apply the concepts and the techniques in their respective disciplines;
- Model the effects non-isothermal problems through different domains;

**Contents**:

identities. **Graphs**: Graph of straight line, circle and trigonometric functions.

2. **Statistics**: **Introduction**: Meaning and definition of statistics, relationship of statistics with social science, characteristics of statistics, limitations of statistics and main division of statistics. **Frequency distribution**: Organisation of data, array, ungrouped and grouped data, types of frequency series, individual, discrete and continuous series, tally sheet method, graphic presentation of the frequency distribution, bar frequency diagram histogram, frequency polygon, cumulative frequency curve. **Measures of central tendency**: Mean, medium and modes, quartiles, deciles and percentiles. **Measures of dispersion**: Range, inter quartile deviation mean deviation, standard deviation, variance, moments, skewness and kurtosis.

**Books Recommended:**


5. **MATHEMATICS FOR CHEMISTRY**

**Credit Hours**: 3

**PREREQUISITES**: Mathematics at Secondary level

**Specific Objectives of Course**: To prepare the students not majoring in mathematics with the essential tools of Calculus to apply the concepts and the techniques in their respective disciplines.

**Course Outline:**

and Indefinite Integrals: Integration by Substitution, Integration by Parts, Change of Variables in Indefinite Integrals. Least-Squares Line.

Recommended Books:

6. MATHEMATICS FOR PHYSICS

Contents

1. Preliminary calculus.
   - Differentiation
     Differentiation from first principles; products; the chain rule; quotients; implicit differentiation; logarithmic differentiation; Leibnitz’ theorem; special points of a function; theorems of differentiation.
   - Integration
     Integration from first principles; the inverse of differentiation; integration by inspection; sinusoidal function; logarithmic integration; integration using partial fractions; substitution method; integration by parts; reduction formulae; infinite and improper integrals; plane polar coordinates; integral inequalities; applications of integration.

2. Complex numbers and hyperbolic functions
   - The need for complex numbers
   - Manipulation of complex numbers
     Additions and subtraction; modulus and argument; multiplication; complex conjugate; division
   - Polar representation of complex numbers
     Multiplication and division in polar form
   - de Moivre’s theorem
     Trigonometrical identities; finding the nth roots of unity; solving polynomial equations
   - Complex logarithms and complex powers
Applications to differentiation and integration

Hyperbolic functions
Definitions; hyperbolic-trigonometric analogies; identities of hyperbolic functions; solving hyperbolic equations; inverses of hyperbolic functions; calculus of hyperbolic functions

3. Series and limits

Series
Summation of series
Arithmetic series; geometric series; arithmetico-geometric series; the difference method; series involving natural numbers; transformation of series

Convergence of infinite series
Absolute and conditional convergence; convergence of a series containing only real positive terms; alternating series test

Operations with series
Power series
Convergence of power series; operations with power series

Taylor series
Taylor’s theorem; approximation errors in Taylor series; standard Maclaurin series
Evaluation of limits

4. Partial differentiation

Definition of the partial derivative
The total differential and total derivative
Exact and inexact differentials
Useful theorems of partial differentiation
The chain rule
Change of variables
Taylor’s theorem for many-variable functions
Stationary values of many-variable functions
Stationary values under constraints

5. Multiple integrals

Double integrals
Triple integrals
Applications of multiple integrals
Areas and volumes; masses, centers of mass and centroids; Pappus’ theorems; moments of inertia; mean values of functions
Change of variables in multiple integrals
Change of variables in double integrals
6. Vector algebra

- Scalars and vectors
- Addition and subtraction of vectors
- Multiplication by a scalar
- Basis vectors and components
- Magnitude of a vectors
- Multiplication of vectors
  Scalar product; vector product; scalar triple product; vector triple product
- Equations of lines and planes
  Equation of a line; equation of a plane
- Using vectors to find distances
  Point to line; point to plane; line to line; line to plane
- Reciprocal vectors

7. Matrices and vector spaces

- Vectors spaces
  Basic vectors; the inner product; some useful inequalities
- Matrices
  The complex and Hermitian conjugates of a matrix
- The determinant of a matrix
  Properties of determinants
- The inverse of a matrix
- The rank of a matrix
- Simultaneous linear equations
  N simultaneous linear equations in N unknowns
- Special square matrices
  Diagonal; symmetric and antisymmetric; orthogonal; Hermitian; unitary normal
- Eigen vectors and eigen values
  Of a normal matrix; of Hermitian and anti-Hermitian matrices; of a unitary matrix; of a general square matrix
- Determination of eigen values and eigen vectors
  Degenerate eigen values

8. Vector calculus

- Differentiation of vectors
  Composite vector expressions; differential of a vector
- Integration of vectors
- Space curves
- Vector functions of several arguments
- Surfaces
- Scalar and vector fields
- Vector operators
Gradient of a scalar field; divergence of a vector field; curl of a vector field

- Vector operator formulae
  Vector operators acting on sums and products; combinations of grad, div and curl

- Cylindrical and spherical polar coordinates
  Cylindrical polar coordinates; spherical polar coordinates
RECOMMENDATIONS

The NCRC HE also strongly recommended that following actions should be taken supported by HEC for the emancipation of the field of Home economics

1. Home economics is a professional field and should be recognized and treated as such by HEC and all relevant institutions.

2. As home economics is a multidisciplinary professional field, in all relevant universities it should be governed by faculty of home economics.

3. If for any reason there are problems in forming a faculty of home economics this field should be under the faculty of science.

4. All affiliated colleges that have been providing exclusive home economics education at postgraduate level must be made constituent colleges or departments of relevant universities and other colleges should be linked to these parent institutions for guidance, support and supervision and to follow the policies set by parent institution.

5. Exclusive funds should be allocated for scholarships, lab up gradation, books, journals, faculty development and exchange programs in the field of home economics.

6. Support should be provided to home economists in education and research regardless of the status of the institution where they study or work.

7. Digital versions of all required books and journals must be made available to all home economists directly through HEC so that scholars not having required resource in their situation also benefit.

8. In view of dearth of opportunities and support for home economist in the last 60 years criteria for promotion and recruitment in higher grades should be relaxed for home economist.

9. For the reason mentioned above criteria for establishment of faculty and department of home economics in universities should also be relaxed for home economics.

10. Opportunities for studying home economies should be available for males also in the universities.

11. Opportunities for studying home economics or its component subjects should be available in large number of colleges so that anyone who wants to study is not deprived.

12. Opportunities for higher education in home economics through distance learning should be available at all levels and most importantly at doctorate.