

**UNDER GRADUATE
COURSE CATALOGUE
2011**



**CHAUDHARY CHARAN SINGH
HARYANA AGRICULTURAL UNIVERSITY
HISAR - 125 004 (HARYANA) INDIA**

FOREWORD

Progress implies change in the pre-determined desirable direction. The comfortable food grain situation in the country is due to skilled human resource, improved technology, highly responsive farming community and enabling policies of Government. Home being an important unit of production and consumption, it is imperative to re-define the scope of Agricultural and Home Sciences in the State Agricultural Universities. Therefore, it is essential that a systematic and institutionalized training and teaching is provided to the graduates coming out not only to meet the expectations of different stakeholders but also to be a propeller of agricultural growth. It is, therefore, essential to modernize and upgrade the curriculum in order to instill a sense of confidence among the students, sharpen their skills and improve their knowledge and competence at farm home.



University College of Agriculture, Home Sciences and Agricultural Engineering & Technology offer Bachelors (Hons.) in Agriculture, Home Science and B. Tech Agricultural Engineering through 4-year programmes, respectively. College of Agriculture and IC College of Home Science have started 6- year programme after 10th standard for their B.Sc. (Hons) Agriculture and B.Sc. (Hons) Home Science. Chaudhary Charan Singh Haryana Agricultural University has revised Course Curriculum from Academic Session 2011-12 as per the recommendations of IV Deans' Committee of ICAR for undergraduate programmes in all the colleges of University. Modifications upto prescribed limit have been made to fulfill the regional requirements. Major emphasis has been given on experiential learning with several options of choosing specializations.

I appreciate the efforts made by Prof. Sucheta Khokhar, Dean, College of Agriculture, Prof. M.K.Garg, Dean, College of Agricultural Engineering and Technology, Prof. Saroj S. Jeet Singh, Dean, IC College of Home Science for the revision of Under Graduate Course Curriculum of University and finalizing it along with Prof. S.S. Dahiya, Registrar. I do hope the revised Course Curriculum of undergraduate programmes in all the colleges of University contained in this document will improve the quality of instructions to enhance knowledge, competitiveness and marketability of our graduates. I congratulate all the faculty members involved in this exercise.

August 30, 2011

A handwritten signature in black ink, appearing to read 'K.S. Khokhar'.

K.S. KHOKHAR
Vice-Chancellor
CCSHAU, Hisar

PREFACE

Globalized and demand driven market necessitate revising the content and delivery of curricula so that the graduates not only meet the expectations of different stake holders but also be propeller of agricultural and household growth. For India to occupy prominent position in the international market, it is important that our graduates also remain in the forefront of developing new technologies and disseminate them to the farming community. It is mandatory for any teaching organization to keep pace with the development of current science and technology developments and incorporate these in their teaching and research programmes. Therefore, CCS Haryana Agricultural University initiated the process to revise Course Curriculum as per the recommendations of IV Dean's Committee of ICAR for under graduate programmes in all constituent colleges of University. Modifications up to prescribed limit have been made to fulfill the regional requirements. Major emphasis has been given on experiential learning with sufficient number of options of choosing specializations. Necessary amendments suggested by Departmental Advisory Committees duly approved by the Board of Studies of constituent colleges, were discussed in the Resident Instructions Committee, and finally approved by the Academic Council. The revised course curricula and syllabi are being implemented from the academic session 2011-2012.



I appreciate the efforts made by Prof. M.K.Garg, Dean, College of Agricultural Engineering and Technology, Prof. Saroj S. Jeet Singh, Dean, IC College of Home Science and Prof. S.S.Dahiya, Registrar for revising and final preparation of Under Graduate Course Curriculum of University. I highly appreciate the sincere efforts made by Dr. K.S.Bangarwa, Professor, Department of Forestry, Dr. Shanti Balda, Professor & Head, Department of Human Development and Family Studies and Dr. R. K. Jhorar, Professor, Department of Soil and Water Engineering for the revision, coordination and compilation of Under Graduate Course Curriculum of the University.

The sincere efforts and help extended by the Dean, College of Basic Sciences and Humanities, Directors and Officers of the university, the Heads of various teaching departments and galaxy of faculty members involved in the preparation of this revised document, is gratefully acknowledged.

Sucheta
30/8/11

August 30, 2011

Sucheta Khokhar
Dean, College of Agriculture
& Chairperson, Committee for
Finalization of Course Curriculum

ACRONYMS

AG ECON	Agricultural Economics
AGM	Agricultural Meteorology
AGRON	Agronomy
BIOINFO	Bioinformatics
BIO	Biology
BIOCHEM	Biochemistry
BOT	Botany
CCA	Co-curricular Activity
CE	Civil Engineering
CHEM	Chemistry
COMP	Computer Section
EE	Electrical and Electronics Engineering
ENG	English
ENT	Entomology
EXT	Extension Education
FMPE	Farm Machinery and Power Engineering
FN	Foods and Nutrition
FOR	Forestry
FRM	Family Resource Management
GP	Genetics and Plant Breeding
HDFS	Human Development and Family Studies
HECM	Home Science Extension Education and Communication Management
HORT	Horticulture
IAHS	Internship/Industrial Attachment of Home Science
LPM	Livestock Production Management
Math	Mathematics
MBB	Molecular Biology and Biotechnology
ME	Mechanical Engineering
MGT	Business Management
MICRO	Microbiology
NC	Non Credit
NCC	National Cadet Corps
NEMA	Nematology
NSS	National Service Scheme
PFE	Processing and Food Engineering
PHY	Physics
PL PATH	Plant Pathology
RAWE	Rural Agricultural Work Experience
SOC	Sociology
SOILS	Soil Science
SST	Seed Science and Technology
STAT	Statistics
SWE	Soil and Water Engineering
TAD	Textile and Apparel Designing
TUT	Tutorial
VSC	Vegetable Science
ZOO	Zoology

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GENERAL INFORMATION

Chaudhary Charan Singh Haryana Agricultural University has revised Course Curriculum for undergraduate programmes in all the colleges of University as per the recommendations of IV Deans' Committee of ICAR and implemented from Academic Session 2011-12.

Undergraduate Programmes College-wise

Programme	Credit Requirements			Residential Limit (No. of Semesters)	
	Core Courses	Experiential Learning	Practical Work Experience	Minimum	Maximum
College of Agriculture					
B. Sc. (Hons.) Agriculture, 4-Year Programme	146	20	20	8	12
B. Sc. (Hons.) Agriculture, 6-Year Programme	216	20	20	12	16
College of Agricultural Engineering and Technology					
B. Tech. (Agricultural Engineering)	174	12	-	8	12
IC College of Home Science					
B. Sc. (Hons.) Home Science, 4-Year Programme	132/124/122	34	20	8	12
B. Sc. (Hons.) Home Science, 6-Year Programme	194/192	34	20	12	16

Examination System: Examination system is external for theory and internal for practical. But internal examination system both for theory and practical also exists for some of the courses which are given below. As per the decision taken by the Academic Council the following guidelines are to be followed for internal examination.

1. Examination system for B.Sc. (Hons.) Agriculture and B.Sc. (Hons.) Home Science 6-year programme:
 - a) The pattern of examination for the 1st and 2nd year will be internal for both theory and practical while thereafter, at par with 4 year UG programmes of respective colleges.

The instructor/teacher concerned shall be responsible for conduct of internal examination.

- b) The weightage of midterm, final and practical examination will be as per table given below:

Credit hours (Theory & Practical)	Weightage/marks		
	Midterm	Final	Practical
1+0	40	60	-
1+1	20	30	50
2+1	25	45	30
2+2	20	30	50
3+1	30	45	25
3+2	25	35	40
2+0	40	60	-
3+0	40	60	-
1+2	10	20	70

- c) For a practical only course - practical examination will be conducted twice, mid term and final. Distribution of marks will be in the ratio of 40:60.
- d) There will be one examination date-sheet each for mid-term and final examinations within the examination schedule.

2. Examination system for the students of B.Sc. (Hons.) Home Science 4 year programme for Arts, Maths and Bio streams:

The students of B.Sc. (Hons.) Home Science, 4 year programme coming from Arts stream will have to clear PHY 100, CHEM 100, MATH 100, ZOO 101 and BOT 101. Further MATH 100 will have to be cleared by the students from bio stream and ZOO 101 and BOT 101 will have to be cleared by students from math stream. The examination system for the above said courses will be internal for both theory and practical.

3. FOR 302 (Environmental Science) will be taught as non credit course and examination system will be internal both for theory and practical.