



## **Department of Community Science**

Dibrugarh University

Dibrugarh - 786004

Assam, India

SYLLABUS FOR FOUR YEAR UNDERGRADUATE PROGRAMME  
(FYUGP) IN **Community SCIENCE** UNDER DIBRUGARH  
UNIVERSITY FOR ITS AFFILIATED COLLEGES AS PER  
NEP-2020 GUIDELINES

**[As approved by the 128<sup>th</sup> Meeting of the Academic Council,  
Dibrugarh University held on 30.06.2023 vide Resolution No. 04]**

## **Preamble**

The National Education Policy (NEP 2020) is a groundbreaking initiative approved by the Union Cabinet of India on 29th July 2020. Its central aim is to overhaul the antiquated education system and achieve the ambitious aspirations of modern education in the 21st century. The NEP 2020 envisions a transformative shift towards holistic and multidisciplinary undergraduate education, which can produce versatile, reflective, and inventive individuals. With a commitment to realizing the objectives of the NEP 2020, Dibrugarh University, Dibrugarh, launched the implementation process in February 2022. The process began with the publication of a general program structure for the Four Year Undergraduate Programme (FYUGP) for all disciplines, in accordance with the UGC's FYUGP Curriculum and Credit Framework. In keeping with the NEP 2020, the Board of Studies (BoS) in Community Science, convened on 19<sup>th</sup> April 2023, endorsed the detailed program structure and syllabus for FYUGP in Community Science, designed under Dibrugarh University for its affiliated colleges. This syllabus intends to provide students with a comprehensive understanding of the discipline and equip them to tackle the demands and prospects of the 21st century.

## **Introduction**

The NEP-2020 presents a unique opportunity to revolutionize the higher education system in India by shifting the focus from teachers to students. This policy promotes Outcome-Based Education, where the desired graduate attributes serve as the foundation for designing programs, courses, and supplementary activities that enable students to achieve the desired learning outcomes. The curriculum framework for the FYUGP in Community science aims to provide a strong foundation in the subject and equip students with valuable cognitive abilities and skills necessary for success in diverse professional careers in a developing and knowledge-based society.

The FYUGP in Community Science offered by Dibrugarh University for its affiliated colleges is a comprehensive and challenging curriculum that aims to provide students with a strong foundation in the discipline while exposing them to cutting-edge developments in the field. The program's structure is multidisciplinary, allowing students to explore the intersections between Community science and other fields of study. This approach provides students with a broader perspective and helps them understand the interconnectedness of various areas of knowledge. The program also aims to promote students' personal and professional growth by motivating them to engage in co-curricular and extracurricular activities, which will help them, develop essential skills like leadership, teamwork, and communication.

The program's syllabus is designed to develop problem-solving abilities and encourage creativity. It includes laboratory work and practical exercises that give students the opportunity to apply theoretical concepts to real-world problems and enhance their scientific skills. The program also emphasizes the importance of ethics, social responsibility, and sustainable development, instilling in students a sense of responsibility towards society and the environment.

The FYUGP program in Community science under Dibrugarh University for its affiliated colleges is designed to prepare students for the challenges and opportunities of the 21st century. The program's multidisciplinary and holistic approach equips students with the skills and knowledge necessary for success in a rapidly changing world. Its commitment to social responsibility and sustainable development reflects its mission to produce as responsible and ethical global citizens.

The NEP 2020 promotes multidisciplinary education in the undergraduate program that integrates social sciences, arts and humanities with science and technology. For holistic development of individuals, it requires to development of all the capacities of human beings including intellectual, social, physical, emotional and moral behaviour. Individuals should be acquainted with fields across the arts, humanities, languages, sciences and social sciences; professional, technical and vocational fields; soft skills, such as communication, discussion and debate etc. In order to develop such holistic and multidisciplinary education, the curriculum and credit framework for the FYUGP in Community Science is designed accordingly. The FYUGP in Community Science consists of six different types of courses- (i) Core courses, (ii) Minor courses, (iii) Generic elective courses (GEC), (iv) Ability enhancement courses (AEC), (v) Value added courses (VAC) and (vi) Skill enhancement courses (SEC).

As per NEP's recommendations, the FYUGP in Community Science also features multiple exit options-

1. A certificate after completing 1 year of study
2. A diploma after completing 2 years of study
3. A Bachelor's degree after completion of a 3-year programme
4. A 4-year multidisciplinary Bachelor's degree

## **Aim and Objectives**

Community Science has contributed a great deal towards national development by training students to take up leadership roles in extension and community outreach programs. The students are encouraged to develop a scientific temper. Familiarizing them with the use of newer technologies, methods in family and community linkages, and sustainable use of resources for human development are the hallmark of education in Community Science. As a discipline, Community Science integrates the ingredients of the sciences, social sciences and technology to facilitate the study of and enhance the quality of human life. Its approach is therefore inherently interdisciplinary. Traditionally, Home Science has adopted an ecological approach in its curriculum that engages the student through teaching, research and extension. The education process in Community Science underscores the importance of the individual's dynamic relationship with his/her family, community and society as a whole, as well as with the resources

in the environment. Higher education learning in Community Science subjects provides students with the opportunity to sharpen their capacities with a sense of social responsibility.

In contemporary times, Community Scientists promote capacity building of individuals and communities for social and economic empowerment. They train community women and youth from various strata of society for entrepreneurship. Many Community Scientists have done exceptionally well as entrepreneurs themselves. They do not remain job seekers but have also become job creators. They gain and provide employment in research organizations, food and textile industries, dietetic practice, education and child development domains, accreditation of green buildings, strategic planning and communication technologies. Keeping in view the growing aspirations of today's youth and the capacity of the Community Science discipline to deliver, the present 4-year NEP System curriculum has been drawn up.

Years of national and international experience in the field have contributed to the wisdom that all the five windows of opportunity that Community Science offers be opened for i.e. Food and Nutrition, Human Development and Childhood Studies, Resource Management and Design Application, Development Communication and Extension and Fabric and Apparel Sciences. In this course, the students will learn the fundamental principles and foundations of all five areas. They are expected to internalize the principle of Community Science, that is, to give back to the community from which they draw, for sustainable development. This is a major contribution of Community Science in both developed and developing societies.

The goals and objectives of FYUGP should aim to:

- To understand and appreciate the role of interdisciplinary sciences in the development and well-being of individuals, families and communities
- To learn about the sciences and technologies that enhance the quality of the life of people
- To acquire professional and entrepreneurial skills for economic empowerment of the student in particular, and community in general
- To develop professional skills in food, nutrition, textiles, housing, product making, communication technologies and human development
- To take basics sciences from the laboratory to the people
- To develop self-employment and start-up.

The proposed curriculum should enable students to acquire the knowledge and skills necessary for self-employment and start-up. Every semester there is an option for vacations that would help the student for self-sufficient in particular and in the community in general.

## **Graduate Attributes**

Graduates in Community Science are expected to possess a range of attributes that will enable them to succeed in their chosen careers. The NEP 2020 recognizes the importance of these attributes and aims to equip students with the necessary knowledge and skills to excel in their chosen careers. Some of such attributes connected to FYUGP are:

1. **Disciplinary knowledge and skills:** Graduates in Community Science should possess a strong foundation as well as the ability to apply this knowledge for self-employment.
2. **Skilled communication:** Community Science graduates should be able to effectively communicate their ideas and findings to the community.
3. **Critical thinking and problem-solving capacity:** Community Science graduates should be able to analyze and evaluate information, develop and implement solutions, and make accurate decisions.
4. **Team player/worker:** Community Science graduates should be able to collaborate effectively with others, including peers, colleagues, and interdisciplinary teams, to achieve common goals.
5. **Project management skills:** Community Science graduates should have the ability to plan, organize, and manage projects, including research projects, from conception to completion.
6. **Digital and ICT efficiency:** Community Science graduates should be proficient in the use of digital tools and information and communication technologies.
7. **Ethical awareness/reasoning:** Community Science graduates should have a strong ethical awareness and the ability to apply ethical reasoning in decision-making, including consideration of social, cultural, and environmental impacts.
8. **National and international perspective:** Community Science graduates should be aware of the global and national issues related to community, as well as their roles and responsibilities as global citizens.
9. **Computational and problem-solving skills:** Community Science graduates should have strong computational skills and the ability for problem-solving.

## **Programme Learning Outcomes**

The NEP 2020 has placed significant emphasis on outcome-based education, which

highlights the importance of specific learning outcomes for each course. For the FYUGP in Community Science, NEP 2020 has set forth a set of programme learning outcomes, which include:

**Knowledge and Comprehension:** Students will be able to demonstrate a thorough understanding of the programmes and concepts of Community Science, in all the five major areas for development.

**Analytical and Problem-Solving Abilities:** Students will have the ability to apply their knowledge of Community Science for better livelihood.

**Research Skills:** Students will possess the ability to participate in research activities, for all-round development of the community

**Communication and Presentation Skills:** Students will be able to express their ideas effectively through both written and oral presentations, and also utilizing suitable tools.

**Ethics and Values:** Students will possess knowledge of the ethical and social implications of their work and demonstrate a dedication to the ethical and responsible conduct of research and practice.

**Interdisciplinary and Multidisciplinary Learning:** Students will be capable of combining their understanding and skills with other disciplines and participating in multidisciplinary research and innovation.

These programme learning outcomes have been formulated to ensure that students acquire a strong basis in Community Science while also developing a range of transferable skills and abilities that will equip them for a diverse range of professions and further studies. By implementing an outcome-based approach and emphasizing learner-centric pedagogies, students will be able to meet these objectives and satisfy the ever-changing job market's demands.

The NEP 2020 emphasizes the importance of outcome-based education, which focuses on specific learning outcomes for each course. The NEP 2020 also provides multiple exit options for students after completion of different durations of study. The program learning outcomes for each exit option are as follows:

**Certificate (after completing 1 year of study):**

1. Demonstrate a basic understanding of fundamental concepts and principles related to the chosen field of study.
2. Develop a basic set of skills and competencies related to the chosen field of study.
3. Demonstrate an ability to apply the basic knowledge and skills acquired to real-world problems.

**Diploma (after completing 2 years of study):**

1. Demonstrate a deeper understanding of the fundamental concepts and principles related to

- the chosen field of study.
2. Develop a more advanced set of skills and competencies related to the chosen field of study.
  3. Demonstrate an ability to apply the advanced knowledge and skills acquired to real-world problems.

**Bachelor's Degree (after completing a 3-year programme):**

1. Demonstrate a comprehensive understanding of the fundamental concepts and principles related to the chosen field of study.
2. Develop a wide range of skills and competencies related to the chosen field of study.
3. Demonstrate an ability to apply the knowledge and skills acquired to real-world problems in a creative and innovative manner.
4. Demonstrate an ability to engage in independent research based activities.
5. Develop effective communication and presentation skills.
6. Demonstrate an awareness of the ethical and social implications of their work and a commitment to ethical and responsible conduct.

**4-Year Multidisciplinary Bachelor's Degree (the preferred option):**

1. All the learning outcomes mentioned for the Bachelor's Degree (after completing a 3-year programme).
2. Develop a multidisciplinary perspective and an ability to integrate knowledge and skills from multiple disciplines.
3. Demonstrate an ability to engage in multidisciplinary research and innovation.
4. Develop leadership and teamwork skills.
5. Demonstrate an ability to adapt to the ever-changing demands of the job market and society.

## **Teaching-Learning Process**

The NEP 2020 has brought about a revolutionary change in the education system in India. One of its major focuses is on outcome-based education, which involves a shift from teacher-centric to learner-centric pedagogies and from passive to active pedagogies. This change requires a significant shift in the way teaching and learning are approached. The NEP 2020 emphasizes that each and every course has to be designed with specific objectives and outcomes in mind. To achieve these goals, appropriate teaching-learning pedagogical tools have to be adopted.

The pedagogy for FYUGP in Community science is based on the **L+T+P** model where **L**,

**T**, and **P** stand for Lecture, Tutorial, and Practical respectively. This approach recognizes the importance of a well-rounded education that includes theoretical knowledge, practical experience, and personal development.

The teaching method for a theory course includes lectures that are aided with prescribed textbooks, e-learning resources, and self-study materials. The lectures are designed to provide a comprehensive understanding of the subject matter. The use of e-learning resources and self-study materials helps students to learn at their own pace and to reinforce their understanding of the material covered in the lectures.

In addition to lectures, tutorials are also an important part of the pedagogy for FYUGP in Community science. Tutorials are interactive sessions where students can ask questions, clarify their doubts, and engage in discussions with their peers and teachers. Tutorials are designed to encourage active learning and to promote critical thinking.

To understand the link between theory and experiments, laboratory courses are designed which include practical classes. This approach recognizes that practical experience is essential for a comprehensive understanding of the subject matter. The laboratory courses are designed to provide hands-on experience to students and to help them develop the necessary skills for conducting activities.

The pedagogy for FYUGP in Community science recognizes the importance of a holistic approach to education. It is not just about acquiring knowledge, but also about developing the necessary skills and competencies to succeed in the real world. The outcome-based approach emphasizes the importance of developing critical thinking skills, problem-solving skills, communication skills, and teamwork skills.

In conclusion, the NEP 2020 has brought about a significant shift in the education system in India. The focus on outcome-based education and learner-centric pedagogies has led to a more holistic approach to education. The pedagogy for FYUGP in Community science is based on the L+T+P model and emphasizes the importance of lectures, tutorials, and practical classes. The use of appropriate teaching-learning pedagogical tools and assessment methods is an integral part of the approach. The outcome-based approach recognizes that education is not just about acquiring knowledge, but also about developing the necessary skills and competencies to succeed in the real world.

## **Assessment Methods**

The outcome-based education emphasizes the importance of measuring the learning outcomes of students. Assessment is an integral part of the pedagogy for FYUGP in Community science. The assessment methods used are designed to evaluate the understanding of the subject matter, the ability to apply theoretical knowledge to practical situations, and the development of critical thinking skills.

All the Core and Minor courses of the FYUGP in Community Science are designed with 4 credits, while those of Generic Elective and Skill Enhancement courses (GEC and SEC) are 3-credit courses. The entire assessment of a 3-credit / 4-credit course will be performed over a total

of 100 marks, out of which 80 marks are allotted to an End-semester examination and the rest of 20 marks are assigned to an In-semester assessment. The total of 80 marks in the End-semester examination for a particular course is distributed over different units as per the corresponding weightage and content of the unit. The question paper should contain multiple choice, short answer type questions and descriptive type questions. The In-semester evaluation should be done in a continuous mode throughout the semester. It could be done through class tests, internal examinations, assignments, group discussion regularity and attendance, classroom interaction, power point presentation etc.

<b>Programme Structure</b>				
<b>Year</b>	<b>Semester</b>	<b>Course</b>	<b>Title of the Course</b>	<b>Total Credits</b>
<b>Year 01</b>	<b>1st Semester</b>	<b>C - 1</b>	Fundamentals of Community Science	4
		<b>Minor 1</b>	Fundamentals of Community Science	4
		<b>GEC - 1</b>	Human nutrition	3
		<b>AEC - 1</b>	Modern Indian Language	4
		<b>VAC - 1</b>	Understanding India	2
		<b>VAC - 2</b>	Health and Wellness	2
		<b>SEC - 1</b>	Early childhood care and education	3
			<b>Total of Semester 1</b>	<b>22</b>
	<b>2nd Semester</b>	<b>C - 2</b>	Human development-I The childhood years	4
		<b>Minor 2</b>	Fundamentals of textiles	4
		<b>GEC - 2</b>	Gender and social justice	3
		<b>AEC - 2</b>	English Language and Communication Skills	4
		<b>VAC - 3</b>	Environmental Science	2

		<b>VAC - 4</b>	Yoga Education	2
		<b>SEC - 2</b>	Computer application in extension and communication	3
			<b>Total of Semester 2</b>	<b>22</b>
	<b>Grand Total (Semester 1 and 2)</b>			<b>44</b>

**Students on exit shall be awarded an Undergraduate Certificate (in the field of study/ discipline) after securing the requisite 44 credits in Semester 1 and 2 provided they secure 4 credits in work-based vocational courses offered during a summer term or internship/ apprenticeship in addition to 6 credits from skill based courses earned during 1st and 2nd Semester**

<b>Year 02</b>	<b>3rd Semester</b>	<b>C - 3</b>	Human Development II, Development in Adolescence and Adulthood	4
		<b>C - 4</b>	Food science and nutrition	4
		<b>Minor 3</b>	Community Science Extension Education	4
		<b>GEC - 3</b>	Care and Well-being in human development	3
		<b>AEC - 3</b>	Communicative English / Mathematical Ability	2
		<b>VAC - 5</b>	Digital and Technological Solutions / Digital Fluency	2
		<b>SEC - 3</b>	CAD in textiles and apparel	3
			<b>Total of Semester 3</b>	<b>22</b>

**Students on exit shall be awarded an Undergraduate Diploma (in the field of study/ discipline) after securing the requisite 88 credits on completion of Semester 4 provided they secure additional 4 credits in skill-based vocational course offered during 1<sup>st</sup> year and 2<sup>nd</sup> year summer term**

**Abbreviations used:**

1. C = Core/ Major
2. GEC = Generic Elective Course / Multidisciplinary Course
3. AEC = Ability Enhancement Course
4. SEC = Skill Enhancement Course

5. VAC = Value Added Course

**List of Major /Core Courses:**

1. C - 1: Fundamentals of Community Science
2. C - 2: Human development I, The childhood years
3. C - 3: Human development II, development in adolescence and adulthood
4. C - 4: Food science and nutrition

**List of Generic Elective Courses:**

1. GEC - 1: Human nutrition
2. GEC - 2: Gender and Social justice
3. GEC - 3: Care and well-being in Human development

**List of Skill Enhancement Courses:**

1. SEC - 1: Early childhood care and development
2. SEC - 2: Computer application in Extension and Communication
3. SEC - 3: CAD in textiles and apparel

**List of Minor Courses:**

1. Minor - 1: Fundamentals of Community Science
2. Minor - 2: Fundamentals of Textiles
3. Minor - 3: Community Science Extension Education

**Detailed Syllabus of 1<sup>st</sup> Semester Core Courses**

**B.A./B.Sc. 1<sup>st</sup> Semester**

**Course Title: Fundamentals of Community Science**

**Course Code: C-1**

**Nature of Course: Core**

**Total Credits: 04**

**Distribution of Marks: 80 (End Semester) + 20 (In Semester)**

**Course Objective:** The objectives of this course are:

1. To enable the students to acquire the knowledge and skills required for a holistic understanding of the field of Community Science.
2. To develop knowledge regarding different branches of Community Science.
3. To make the students understand the role of computers in Community Science.

<b>Units</b>	<b>Contents</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Total Hours</b>
I 20 Marks	<p>Concept of Community Science:</p> <p>1.1 Definition, meaning of Community Science. 1.2 Objectives, philosophy and scope of Community Science. 1.3 Modern concept of community Science.</p>	15	02	-	17
II 20 Marks	<p>Concept and scope of areas of Community Science:</p> <p>2.1 Food Science and Nutrition. 2.2 Human Development and Family Studies. 2.3 Textiles and Apparel Designing. 2.4 Resource Management and Consumer Studies. 2.5 Extension and Communication Management.</p>	12	02	-	14
III 20 Marks	<p>Career Avenues in Community Science:</p> <p>3.1 Interest and abilities required for different vocation. 3.2 Careers related to different areas of community Science. 3.3 Scope of self-employment in Community Science. 3.4 Role of Community science education in the empowerment of individual, family and community.</p>	13	02	-	15
IV 20 Marks	<p>Information and Communication Technology in Community Science:</p> <p>4.1 Concept, Definition of ICT 4.2 Role of ICT in Community Science 4.3 ICT tools used in Community Science</p>	12	02	-	14
	<b>Total</b>	52	08	-	60

**Where – L: Lecture, T: Tutorials, P: Practical**

### **Modes of In-Semester Assessment**

**(20 Marks)**

- |   |                 |
|---|-----------------|
| 1. One internal Examination                           | <b>10 Marks</b> |
| 2. Others (Any one) -                                 | <b>10 Marks</b> |
| • Group Discussion                                    |                 |
| • Seminar Presentation on any of the relevant topics. |                 |
| • Assignment on any of the relevant topics.           |                 |

**Learning Outcomes:** After completion of the course, the learner will be able to –

- Understand the basics of Community Science.
- Identify the vocations related to Community Science.
- Understand the use of ICT in Community Science.

### **Suggested readings (latest edition):**

1. Chandra, A, Shah., A, Joshi, U. Fundamentals of Teaching Home Science, Sterling Publication.
2. Chandra, A., Introduction to Home Science, Metropolitan educational Paper Backs.
3. Das, R. R, Ray, B., Teaching of Home Science, Sterling Publication PVT. LTD.
4. Sharma, R. A, Lall, R., Educational Technology, Book Depot.
5. Screne, S., Ahlawat, S. Textbook of Home Science Extension Education, Daya Publishing House.

### **Detailed Syllabus of 1<sup>st</sup> Semester Minor Courses**

**B.A./B.Sc. 1<sup>st</sup> Semester**

**Course Title: Fundamentals of Community Science**

**Course Code: M-1**

**Nature of Course: Minor**

**Total Credits: 04**

**Distribution of Marks: 80 (End Semester) + 20 (In Semester)**

**Course Objective:** The objectives of this course are:

4. To enable the students to acquire the knowledge and skills required for a holistic understanding of the field of Community Science.
5. To develop knowledge regarding different branches of Community Science.
6. To make the students understand the role of computers in Community Science.

<b>Units</b>	<b>Contents</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Total Hours</b>
I 20 Marks	Concept of Community Science: 1.1 Definition, meaning of Community Science. 1.2 Objectives, philosophy and scope of Community Science. 1.3 Modern concept of community Science.	15	02	-	17
II 20 Marks	Concept and scope of areas of Community Science: 2.1 Food Science and Nutrition. 2.2 Human Development and Family Studies. 2.3 Textiles and Apparel Designing. 2.4 Resource Management and Consumer Studies. 2.5 Extension and Communication Management.	12	02	-	14
III 20 Marks	Career Avenues in Community Science: 3.1 Interest and abilities required for different vocation. 3.2 Careers related to different areas of community Science. 3.3 Scope of self-employment in Community Science. 3.5 Role of Community science education in the empowerment of individual, family and community.	13	02	-	15
IV 20 Marks	Information and Communication Technology in Community Science: 4.1 Concept, Definition of ICT 4.2 Role of ICT in Community Science 4.3 ICT tools used in Community Science	12	02		14

	<b>Total</b>	52	08	-	60

**Where – L: Lecture, T: Tutorials, P: Practical**

### **Modes of In-Semester Assessment**

**(20 Marks)**

- |  |                 |
|--|-----------------|
| 3. One internal Examination  | <b>10 Marks</b> |
| 4. Others (Any one) -  | <b>10 Marks</b> |
| <ul style="list-style-type: none"> <li>● Group Discussion</li> <li>● Seminar Presentation on any of the relevant topics.</li> <li>● Assignment on any of the relevant topics.</li> </ul> |                 |

**Learning Outcomes:** After completion of the course, the learner will be able to –

- Understand the basics of Community Science.
- Identify the vocations related to Community Science.
- Understand the use of ICT in Community Science.

### **Suggested readings (latest edition):**

6. Chandra, A, Shah., A, Joshi, U. Fundamentals of Teaching Home Science, Sterling Publication.
7. Chandra, A., Introduction to Home Science, Metropolitan educational Paper Backs.
8. Das, R. R, Ray, B., Teaching of Home Science, Sterling Publication PVT. LTD.
9. Sharma, R. A, Lall, R., Educational Technology, Book Depot.
10. Screne, S., Ahlawat, S. Textbook of Home Science Extension Education, Daya Publishing House.

## **Detailed Syllabus of 1<sup>st</sup> Semester GE Courses**

**B.A. / B.Sc. 1<sup>st</sup> Semester**

**Course Title: Human Nutrition**

**Course Code: GEC - 1**

**Nature of Course: Generic Elective Course (GEC)**

**Total Credit: 3 credits**

**Distribution of marks: 80 (End semester) + 20 (In semester)**

### **Course Objectives:**

1. To obtain knowledge of different food groups, their compositions and nutrients present in food.
2. To understand the relationship between food, nutrition and health.

<b>Units</b>	<b>Contents</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Total</b>
I 20 Marks	Basic concept of Food and Nutrition: 1.1 Concept of Food, Nutrition, Malnutrition, Health, Nutritional status, Diet. 1.2 Understanding relationship between food, nutrition and health. 1.3 Functions of food.	10	1	-	11
II 20 Marks	Classification of food: 2.1 Various classification of food, food groups.	10	1	-	11

	2.2 Balanced diet, importance of balanced diet, Balanced Diet Recommended (BDR).				
III 20 Marks	Nutrients present in food:  3.1 Energy balance, functional food.  3.2 Recommended Dietary Allowances, dietary sources, functions, effects of dietary and excess consumption of Carbohydrate, Protein, Fat, Vitamin, mineral, Water.	10	02	-	12
IV 20 Marks	Nutrition during Life Cycle:  4.1 Physiological consideration and nutritional concern for infant, pre-school children, adolescent.  4.2 Physiological consideration and nutritional requirement during pregnancy and lactating mother.	10	01	-	11
	<b>Total</b>	40	5	-	45

Where – L: Lecture, T: Tutorials, P: Practical

**Modes of In-Semester Assessment:**

20 Marks

1. One internal Examination

**10 Marks**

2. Others (Any one) -

**10 Marks**

○ Group Discussion

○ Seminar Presentation on any of the relevant topics.

○ Assignment on any of the relevant topics.

**Learning Outcome:** After successful completion of the course, the learners will be able to –

1. Obtain knowledge on different terms related to foods.

2. Understand the functions, effects of deficiency and excess of different nutrients.

**Recommended Readings-**

- Sumati,R.; Mudambi M.V.; Gopal R.(2012), Fundamentals of Food, Nutrition and Diet Therapy, New Age International Publishers.
- Srilakshmi B.(2014), Dietetics, New Age International Publishers.

3. Chadha, R. and Mathur P. (2015), Nutrition: A Life Cycle Approach. Orient Blackswan, New Delhi.
4. ICMR (2010) Recommended Dietary Allowances for Indians. Published by National Institute of Nutrition, Hyderabad.
5. Dutta, S., *Khadyaarupusti*, published by L.T.K College publication Cell.

### Detailed Syllabus of 1<sup>st</sup> Semester SEC

**B.A/B.Sc. 1<sup>st</sup> semester**

**Course title: Early Childhood Care and Development**

**Course Code: SEC-1**

**Nature of Course: Skill Enhancement Course (SEC)**

**Total Credits: 3 (Theory 2, Practical 1)**

**Distribution of Marks: Theory 60 (End semester) + 10 (In semester)**

**Practical 20 (End semester) + 10 (In semester)**

**Course Objective:** The objectives of this course are:

1. To enable the students, understand the nature, aims and objectives of early childhood care and education.
2. To make students aware of early childhood years and significance of intervention programs for early childhood development.
3. To impart knowledge on program planning and executing for young children.

UNITS	CONTENTS	L	T	P	Total Hours
I 15 Marks	Introduction to Early Childhood Care and Education: 1.1 Concept, meaning, scope and significance of ECCE. 1.2 Principles and Objectives of ECCE. 1.3 Types of Pre-School: play centre, day care, Montessori, Kindergarten, Balwadi, Anganwadi etc.	15	2	-	17

	<p>1.4 Contributions of educational Philosophers: Global and Indian perspective – Froebel Maria Montessori, GijubhaiBadheka, TarabaiModak, M. K. Gandhi and Rabindra Nath Tagore.</p> <p>1.5 Recent policies in ECCE – Various Education Commissions of India.</p> <p>1.6 Curriculum framework for ECCE 2012/2013, New Education Policy 2020.</p>				
<p>II</p> <p>15 Marks</p>	<p>Organization of Pre-School centers:</p> <p>2.1 Concept of organization and administrations of ECCE centers.</p> <p>2.2 Building and equipment – location and site, arrangement of room, types, size of rooms, play grounds, storage facilities, selection of outdoor and indoor equipment.</p> <p>2.3 Role and responsibilities, essential qualities of teacher / other personal.</p> <p>2.4 Record and types of record, aims and purposes.</p> <p>2.5 Programme planning, setting goals and objectives of plans, long terms, short term, weekly and daily planning, routine and schedule.</p>	14	2	-	16
<p>III</p> <p>20 Marks</p>	<p>Activities for ECCE:</p> <p>3.1 Language – Goal of language, types of listening and activities (songs, acts, jokes, stories), free conversation.</p> <p>3.2 Art and craft activities – types of activities - chalk, crayon, paints, paper work, best out of waste.</p> <p>3.3 Songs, objectives of music education.</p> <p>3.4 Mathematical concepts like classification, conversation, serration, comparison and counting.</p>	10	2	-	12

	3.5 Science experiences – role of teacher in some important science experiences.				
	3.6 Social studies – field trips, goal of social studies, promoting social studies through celebrations of festivals				
	<b>Total</b>	<b>39</b>	<b>6</b>	<b>-</b>	<b>45</b>
<b>Practical</b>	Field visit report on-			15	<b>15</b>
15Marks	1. Visit to various centers which cater to the pre-school stage. eg. Day Care Centre, Balwadi, Anganwadi Centre.				
15 Marks	2. Planning and executing activities in ECC centers. Preparing teaching material kit and presentation in mock set up.			15	15
	<b>Total</b>	<b>39</b>	<b>6</b>	<b>30</b>	<b>75</b>

Where L: Lectures T: Tutorials P: Practical

### Modes of In-semester assessment:

20 Marks

1. One internal Examination **10 Marks**
2. Others(Any one) **10 Marks**
  - Group Discussion
  - Seminar Presentation on any of the relevant topics.
  - Assignment on any of the relevant topics.
  - Organizing awareness program on importance of ECCE for all round development in young children.

**Learning Outcomes:** After the completion of this course, the learner will be able to:

1. Identify various indigenous (Indian) models of ECE and apply it to understand the current early childhood research, theoretical trends and issues.
2. Analyze curriculum models and pedagogical approaches in early childhood education.
3. Create developmentally appropriate programs for young children.

### Suggested Readings (latest edition):

1. Grewal, J.S. , Early Childhood Education
2. Aggarwal, J.C., Early Childhood Care and Education: Principles and Practices, Shipra: New Delhi

3. Mohanty, J, Mohanty, B., Early Childhood Care and Education, Dup and Dup Publications, New Delhi
4. Singh, A., Playing to Learn: A Training Manual for Early Childhood Education, M.S. Swaminathan, M.,The First Five Years. Sage Publications
5. Bhatia and Bhatia , Theory and Principles of Education, Delhi
6. Sen Gupta, M., Early Childhood Care and Education; PHI Learning Pvt. Ltd., Delhi
7. Kaul, Vanita , Early Childhood Education Programme, NCERT, New Delhi

## Detailed Syllabus of 2<sup>nd</sup> Semester Core Courses

### B.A. / B.Sc. 2<sup>nd</sup> Semester

**Course Title: HUMAN DEVELOPMENT-I THE CHILDHOOD YEARS**

**Course Code: C-2**

**Nature of Course: Core**

**Total Credit: 4 credit (3+1) Theory 3 credit, Practical 1 credit**

**Distribution of Marks: Theory 60 (End semester) + 10 (In semester)**

**Practical 20 (End semester) + 10 (In semester)**

**COURSE OBJECTIVES:** The objectives of this Course are:

1. To introduce the concept of Human Development.
2. To explain the domains of growth and development at different age level (from conception to childhood)
3. To analyze or identify the basic maternal and child health care.

UNITS	CONTENTS	L	T	P	Total Hours
I 15 Marks	<b>INTRODUCTION TO HUMAN DEVELOPMENT:</b>  <b>1.1</b> Concept, need and scope of Human Development. <b>1.2</b> Domains, stages and context of development. <b>1.3</b> Principles of growth and development. <b>1.4</b> Factors influencing growth and development. <b>1.5</b> Definition and purposes of developmental task.	10	02		12

<p style="text-align: center;">II</p> <p>15 Marks</p>	<p><b>PRENATAL AND POSTNATAL DEVELOPMENT AND CARE:</b></p> <p><b>2.1</b> Reproductive health.</p> <p><b>2.2</b> Stages of prenatal development.</p> <p><b>2.3</b> Problem during prenatal period(Physical and Psychological)</p> <p><b>2.4</b> Types of birth and birth injury.</p> <p><b>2.5</b> Post-natal care of the mother and newborn baby.</p> <p><b>2.6</b> Immunization and importance of breast feeding.</p> <p><b>2.7</b> Infancy and different aspects of development.</p>	14	02		16
<p style="text-align: center;">III</p> <p>20 Marks</p>	<p><b>EARLY AND LATE CHILDHOOD PERIOD:</b></p> <p><b>3.1</b> Characteristics and developmental task.</p> <p><b>3.2</b> Physical and Motor development.</p> <p><b>3.3</b> Social and Emotional development.</p> <p><b>3.4</b> Cognitive and Language development.</p>	15	02		17
		39	6		45
<p><b>Practical</b></p> <p>15 Marks</p> <p>15 Marks</p>	<p><b>4.1</b> Report on Cultural practices of community related to pregnancy and infancy.</p> <p><b>4.2</b> Plan and develop educational tools for preschool children and parents/caregivers</p>			15	15
	<b>Total</b>	39	6	30	75

**MODES OF IN-SEMESTER ASSESSMENT:**

**20 Marks (T-15,P-05)**

- |   |                 |                 |
|---|-----------------|-----------------|
| 1. One internal Examination                           | <b>10 Marks</b> |                 |
| 2. Others(Any one)                                    | -               | <b>10 Marks</b> |
| ○ Group Discussion                                    |                 |                 |
| ○ Seminar Presentation on any of the relevant topics. |                 |                 |
| ○ Assignment on any of the relevant topics.           |                 |                 |

**LEARNING OUTCOMES:** After the completion of this course, the learner will be able to:

1. Identify the stages of human development and describe the milestones that indicate different stages in each developmental domain.
2. Identify typical developmental characteristics (behaviors and skill development) of children in all developmental domains.
3. Demonstrate an understanding of the biological, Psychological, social and cultural influences of lifespan human development

**Suggested readings (latest edition):**

1. Hurlock E. B. , Child Development, sixth edition, Tata Mc Grow Hill, New Delhi
2. Hurlock E.B. ,“Developmental Psychology”, A Lifespan Approach, 5 th Edition Tata Mc Grow Hill, New Delhi
3. Srivastava, Sudha Ram , ‘Textbook of Human Development A Lifespan Approach, Schand and Company Limited, New Delhi.
4. DevdasRajammal P and Jaya, N , , ‘A Text Book on Child Development, Macmillan Publishers India Limited, Chennai.
5. Kakati, Deka, GoswamiMahanta et al ,ManabBikash’, Ashok publication, Panbazar, Guwahati.
6. Sing Asha (2015) ‘Foundations of Human Development’ A life Span Approach, Orient Blacksuan Pvt. Ltd. Hyderabad.
7. Santroch John W , , ‘Life span Development’, MC Graw Hill Education (India) Private limited, Chennai.
8. Kakati S.,Mahanta R. et al, A Text Book Of Human Development,World Book House, Panbazar, Guwahati
9. Sharma P and GairolaL ,Fundamentals Of Child Development and Child Care” Sterling Publishers Pvt Ltd, L-10,Green Park Extension, New Delhi.

## Detailed Syllabus of 2<sup>nd</sup> Semester Minor Courses

**B.A/B.Sc. 2<sup>nd</sup> semester**

**Course title: FUNDAMENTALS OF TEXTILES**

**Course Code: Minor-2**

**Nature of Course: Minor Course**

**Total Credits: 4 (Theory 3, Practical 1)**

**Distribution of Marks: Theory 60 (End semester) + 10 (In semester)**

**Practical 20 (End semester) + 10 (In semester)**

**COURSE OBJECTIVE:** The objectives of this course are:

1. To develop an understanding of the properties and characteristics of different types of fibers and fabrics.
2. To learn about the different methods used to produce textiles.
3. To develop an understanding of wet processing in textiles.

UNITS	CONTENTS	L	T	P	Total Hours
I 20 Marks	<b>Production, chemistry, properties and usage of fibres</b> <b>1.1</b> Introduction to Textilefibres: <ul style="list-style-type: none"><li>● Morphology of textile fibres</li><li>● Primary and secondary properties</li><li>● Fibre classification</li></ul> <b>1.2</b> Natural fibres: <ul style="list-style-type: none"><li>● Cotton</li><li>● Silk</li><li>● Wool</li></ul> <b>1.3</b> Man-made fibers: <ul style="list-style-type: none"><li>● Rayon</li></ul>	15	02		17

	<ul style="list-style-type: none"> <li>● nylon</li> <li>● Polyester</li> <li>● Acrylic</li> <li>● elastomeric fiber</li> </ul>				
II 15 Marks	<b>Production and properties of Yarns and fabrics</b> 2.1 Yarn construction: <ul style="list-style-type: none"> <li>● Mechanical Spinning</li> <li>● Chemical Spinning</li> </ul> 2.2 Types of yarns: <ul style="list-style-type: none"> <li>● Staple and Filament</li> <li>● Simple yarns and Complex yarns</li> <li>● Yarn Properties</li> </ul> 2.3 Classification of weaves 2.4 Non-woven fabrics	14	02		16
III 15 Marks	<b>Basics of Wet Processing</b> 3.1 Classification and uses of finishes 3.2 Fundamentals of dyeing and printing <b>3.3 Diversity, Indigenous uses of traditional practices by the community for</b> 3.3.1 Natural dyes 3.3.2 Natural Fiber	10		02	12
	<b>Total</b>	<b>39</b>	<b>6</b>	<b>-</b>	<b>45</b>
<b>Practical</b> 15 Marks	1. Fibre Identification tests: <ul style="list-style-type: none"> <li>● Visual</li> <li>● Burning test</li> <li>● Microscopic test</li> <li>● chemical test</li> </ul> 2.Extraction of fibers from natural			15	15

15 Marks	sources and product development / Product development from dyeing/ printing			15	15
	<b>Total</b>	39	6	30	<b>75</b>

**(L= Lecture, T= Tutorial, P= Practical, M= Marks)**

**MODE OF IN-SEMESTER ASSESSMENT: 20 MARKS**

- |   |                 |
|---|-----------------|
| 1. One internal Examination                           | <b>10 Marks</b> |
| 2. Others(Any one) -                                  | <b>10 Marks</b> |
| ○ Group Discussion                                    |                 |
| ○ Seminar Presentation on any of the relevant topics. |                 |
| ○ Assignment on any of the relevant topics.           |                 |

**LEARNING OUTCOMES:** After the completion of the course, the learner will be able to:

- 1 Developing an understanding of the basic concepts, principles, properties, related to textiles.
- 2 Learning about the different types of fibers and fabrics used in the textile industry.
- 3 Developing an understanding of the wet processing methods used in textiles.

**Suggested readings (latest edition):**

1. Corbman, P.B., Textiles- Fiber to Fabric (6th Edition), Gregg Division/McGraw Hill Book Co., US.
2. Joseph, M.L., Essentials of Textiles (6th Edition), Holt, Rinehart and Winston Inc., Florida.
3. Vilensky G., Textile Science, CBS Publishers and Distributors, Delhi.
4. Tortora, G. Phyllis, Understanding Textiles, McMillan Co. USA.
5. Sekhri S., Textbook of Fabric Science: Fundamentals to Finishing, PHI Learning, Delhi
6. Phukon, R., Fundamentals of textiles, Notion Press
7. Phukon, R., Indigenous Dyes and Home Dyeing, Purbanchal Prakash, Guwahati, Assam.
8. Phukon, R., *PrakritikRong: BoyanSilpotYerPrayogPodhoti*, PurbanchalPraksh, Guwahati, Assam

**Detailed Syllabus of 2<sup>nd</sup> Semester GE Courses**

**B.A./B.Sc. 2<sup>nd</sup> Semester**  
**Course Title: Gender and Social Justice**  
**Course Code: GEC-2**  
**Nature of Course: Generic Elective Course (GEC)**  
**Total Credit: 3 credit**  
**Distribution of marks: 80 (End semester) + 20 (In semester)**

**Course Objectives:**

- To enable the students to understand the gender issues.
- To know the gender laws, media and perpetuation of gender stereotypes.
- To know the policies and programs for female children and women.

<b>Units</b>	<b>Contents</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Total Hours</b>
I 20 Marks	Understanding gender: 1.1 Sex and gender. 1.2 Gender Identity Male, female, transgender, non-binary, agender, pan gender, gender queer, two-spirit, third gender. 1.3 Masculinity and femininity. 1.4 Biological and cultural determinants of being male and female.	10	2	-	12
II 20 Marks	Social construction of Gender 2.1 Socialization for gender 2.2 Gender roles, stereotypes and identity 2.3 Transgender: mythology, literature, work, media, popular culture, caste.	10	2	-	12
III 20 Marks	The girl child and women in India. 3.1 Demographic profile. 3.2 Status of health, nutrition and education. 3.3 Female feticide infanticide and violence against women.	7	2	-	9
IV	Gender Justice	10	2	-	12

20 Marks	4.1 Women's movement in India. 4.2 Laws, policies and programs for female children and women.				
	<b>Total</b>	37	8	-	45

Where L: Lectures T: Tutorials P: Practical

**Modes of In-Semester Assessment:**

20 Marks

- |   |                 |
|---|-----------------|
| 1. One internal Examination                           | <b>10 Marks</b> |
| 2. Others(Any one) -                                  | <b>10 Marks</b> |
| o Group Discussion                                    |                 |
| o Seminar Presentation on any of the relevant topics. |                 |
| o Assignment on any of the relevant topics.           |                 |

**Learning Outcomes:** After the completion of this course, the learner will be able to:

1. Describe basic concepts of gender and relevance of gender studies as an academic discipline.
2. Analyze human rights in terms of gender equality and gender equity.
3. Critically analyze existing laws and the legal system through a gender lens.

**Suggested readings (latest edition):**

1. Menon, N. , Sexualities: Issues in Contemporary Indian feminism, New Delhi, Sage Publication.
2. Mohanty, M. , Class, Caste and Gender, New Delhi, sage Publication.
3. Saikia, N. , Indian Women: A Social- Legal perspective, New Delhi, Serials Publications.

**Detailed Syllabus of 2<sup>nd</sup> Semester SEC**

**B.A/B.Sc. 2<sup>nd</sup> semester**

**Course title: Computer Application in Extension and Communication**

**Course Code: SEC-2**

**Nature of Course: Skill Enhancement Course (SEC)**

**Total Credits: 3 (Theory 2, Practical 1)**

**Distribution of Marks: Theory 60 (End semester) + 10 (In semester)**

## Practical 20 (End semester) + 10 (In semester)

Course Objective: The objectives of this course are:

1. To develop knowledge regarding computer application designing.
2. To analyze the challenges in use of computer for designing in Extension and communication.
3. To identify the use of ICE material in community.

Units	Contents	L	T	P	Total
I 15 Marks	<b>Computer Application Designing.</b> 1.1 Concept, meaning of computer application designing. 1.2 Need of computer application designing in extension and Communication. 1.3 Use of Computer application designing in extension and Communication.	15	02	-	17
II 15 Marks	<b>IEC Material</b> 1.1 Concept, meaning and importance of IEC Material. 1.2 Different types of IEC Materials. 1.3 Graphics and audio-visual charts, posters, flashcard. Flexes, pamphlets, leaflets, etc. 1.4 Mass Media: - Radio script writing and TV program script writing. - Newspaper, magazine article writing. - Planning and production of documentary/ short flim	14	02	-	16
III 20 Marks	<b>Use of the following software for making IEC material and teaching aids:</b> <ul style="list-style-type: none"> <li>● Word processor</li> <li>● Presentation and animation software</li> <li>● Coral Draw</li> <li>● Paint and Photoshop</li> <li>● Page maker</li> </ul>	10	02		12
		39	06		45

<b>Practical</b>	<b>Planning and preparation of IEC material:</b> <ul style="list-style-type: none"> <li>Graphics aids chart, poster, flash card, leaflet (any two)</li> <li>Mass media – Radio, TV, newspaper, magazine, documentary and short film.</li> </ul>			15	15
<b>15 Marks</b>				15	15
<b>15 Marks</b>					
	<b>Total</b>	39	06	30	75

Where – L: Lecture, T: Tutorials, P: Practical

**Modes of In Semester assessment:**

**20 Marks**

- |   |                 |
|---|-----------------|
| 1. One internal Examination                           | <b>10 Marks</b> |
| 2. Others(Any one)                                    | <b>10 Marks</b> |
| ○ Group Discussion                                    |                 |
| ○ Seminar Presentation on any of the relevant topics. |                 |
| ○ Assignment on any of the relevant topics.           |                 |

Learning Outcome: After the learning of the course, the learner will be able to –

1. Identify the need of Computer application designing in Extension.
2. Analyze the use of IEC materials in Extension and Communication.

**Suggested readings (latest edition):**

1. Kihrwadkar A, Puspanandam, Information and Communication Technology in Education, Swarup and Sons, Delhi.
2. Sampath K, Introduction to Educational Technology, Sterling Publishers Pvt. Ltd.
3. Wittich and Schuller , Mass Communication in India, Jaico Publishing House, Ahmedabad.
4. Bernice Hurst., the Handbook of Communication Skills, kogan Page Limited, London.

**B.A./ B.Sc. 3<sup>rd</sup> semester**

**Title of the course: HUMAN DEVELOPMENT-II: DEVELOPMENT IN ADOLESCENCE AND ADULTHOOD**

**Course Code: C-3**

**Nature of the course: Core**

**Total Credit- 4 credit (3+1) Theory-3 credit Practical-1credit**

**Distribution of Marks: Theory 60 (End semester) + 10 (In semester)**

**Practical 20 (End semester) + 10 (In semester)**

**COURSE OBJECTIVES:** The objectives of this Course are:

1. To introduce the concept of puberty, adolescence and adulthood.
2. To explain the physical, intellectual, social and emotional facets of transition from adolescence to adulthood.
3. To identify the physical changes and health issues among the elderly.

<b>UNITS</b>	<b>CONTENTS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Total Hours</b>
I 20 Marks	<b>INTRODUCTION TO PUBERTY AND ADOLESCENCE</b>  1.6 Meaning and characteristics of Puberty. 1.7 Definition, meaning and characteristics of adolescence. 1.8 Developmental tasks of adolescence period. 1.9 Physical and socio-emotional development of adolescence. 1.10 Problems during adolescence. 1.11 Impotence of life skills for adolescence.	10	02		12
II 20 Marks	<b>INTRODUCTION TO ADULTHOOD:</b>  2.1 Meaning and classification of Adulthood. 2.2 Characteristics of early to late adulthood. 2.3 Developmental task from early to late adulthood.	14	02		16
III	<b>CHANGES THROUGHOUT ADULTHOOD:</b>  3.1 Physical and physiological changes	15	02		17

20 Marks	throughout adulthood.  <b>3.2</b> Socio-emotional and cognitive changes throughout adulthood.  <b>3.3</b> Living arrangement for the elderly.  <b>3.4</b> Institutional living for elderly.				
		39	06		45
<b>Practical</b>				15	15
15 Marks	<b>1</b> Familiarity with psychological tests of intelligence and personality.			15	15
15 Marks	<b>2</b> .Field study report on visit to old-age home.				
		39	06	30	75

**MODES OF IN-SEMESTER ASSESSMENT:**

**20 Marks**

1. One internal Examination
2. Others(Any one) -
  - Group Discussion
  - Seminar Presentation on any of the relevant topics.
  - Assignment on any of the relevant topics.

**10 Marks**

**10 Marks**

**LEARNING OUTCOMES:** After the completion of this course, the learner will be able to:

1. Gain basic knowledge about the physical, psychological and physiological changes that take place during the period from puberty to adulthood.
2. Describe adolescent identity development and social influences on development.
3. Identify the adolescence related (psychological) problems and intervention.

**Suggested readings (latest edition):**

1. Hurlock E. B. , Child Development, sixth edition, Tata Mc Grow Hill, New Delhi
2. Hurlock E.B. ,Developmental Psychology” , A Lifespan Approach, 5 th Edition Tata Mc Grow Hill, New Delhi
3. Srivastava, Sudha Ram ,Textbook of Human Development A Lifespan Approach, Schand and Company Limited, New Delhi.
4. DevdasRajammal P and Jaya, N, ,A Text Book on Chid Development, Macmillan Publishers India Limited, Chennai.
5. Kakati, Deka, GoswamiMahanta et al ,ManabBikash’, Ashok publication, Panbazar, Guwahati.
6. Sing Asha ,Foundations of Human Development’ A life Span Approach, Orient Blacksuan Pvt. Ltd. Myderabad.
7. Santroch John W, ‘Life span Development’, MC Graw Hill Education (India) Private limited, Chennai.

### **Detailed Syllabus of 3<sup>rd</sup> Semester Core Courses**

**B.A./ B.Sc. 3<sup>rd</sup> semester**

**Title of the course: Food Science and Nutrition**

**Course Code: C-4**

**Nature of the course: Core**

**Total Credit- 4 credit (3+1) Theory-3 credit Practical-1credit**

**Distribution of Marks: Theory 60 (End semester) + 10 (In semester)**

**Practical 20 (End semester) + 10 (In semester)**

#### **Course Objective:**

1. To obtain knowledge of different food groups, their composition and nutrients present in food.
2. To study different method of cooking food.
3. To obtain knowledge regarding enhancement of nutritional quality of food.

<b>Unit</b>	<b>Content</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Total Hours</b>

I 15 Marks	Introduction to food and food groups:  1.1 Concept and definition of terms- health, food, nutrient, nutrition, malnutrition. 1.2 Importance and functions of food 1.3 Food groups and nutrients- classification of food, various food groups, nutrient present in food.	14	2		16
II 15 Marks	Food Preparation:  2.1 Cooking of foods  Reasons of cooking food.  2.2 Methods of cooking- conduction, convection, radiation microwave heating.  2.3 Cooking Media- air, water, steam, fat  2.4 Advantages and disadvantages of cooking, retention of nutrient during cooking.	15	2		17
III 20 Marks	Enhancement of nutritional quality of food:  3.1 Enhancement of nutritional quality of food- Supplementation. Germination, Fermentation, Fortification and GM foods.  3.2 Concept of Nutraceuticals. Types of nutraceuticals ,benefits of nutraceuticals	10	2		12
	<b>Total</b>	<b>39</b>	<b>06</b>		<b>45</b>
<b>Practical</b> 15 Marks	1. Weights and their equivalent measures. 2. Study of common terms used in cooking			15	15

15 Marks	3. Preparation of items by using different medium and methods of cooking (Any Three) Product development by using method of germination/ supplementation/ fermentation.			15	15
	<b>Total</b>	39	06	30	75

**Where L: Lectures T: Tutorials P: Practical**

### **Modes of In-Semester Assessment:**

- |  |                 |
|--|-----------------|
| 1. One internal Examination  | <b>10 Marks</b> |
| 2. Others(Any one) -   | <b>10 Marks</b> |
| <ul style="list-style-type: none"> <li>○ Group Discussion</li> <li>○ Seminar Presentation on any of the relevant topics.</li> <li>○ Assignment on any of the relevant topics.</li> </ul> |                 |

### **Learning Outcomes:**

1. Identify food groups and nutrients present in food.
2. Analyze different method of cooking.
3. Identify the methods of enhancement of nutritional quality of food.

### **Suggested readings (latest edition):**

1. Sumati, R.; Mudambi , Fundamentals of Foods, Nutrition and Diet Therapy , New Age International Pvt. Ltd. Publishers, New Delhi.
2. Srilakshmi, B. , Nutrition Science , New Age International Pvt. Ltd. Publishers, New Delhi.
3. Srilakshmi, B. , Food Science , New Age International Pvt. Ltd. Publishers, New Delhi.
4. Bamji, Krishnaswamy, Brahman, Textbook of Human Nutrition .
5. Dutta, S., *Khadyaarupusti*, published by L.T.K College publication Cell.

## **Detailed Syllabus of 3<sup>rd</sup> Semester Minor Courses**

**B.A/B.Sc. 3<sup>rd</sup> semester**

**Course title: Community Science Extension Education**

**Course Code: Minor-3**  
**Nature of Course: Minor**

**Total Credits: 3 (Theory 2, Practical 1)**  
**Distribution of Marks: Theory 60 (End semester) + 10 (In semester)**  
**Practical 20 (End semester) + 10 (In semester)**

**COURSE OBJECTIVE:** The objectives of this course are:

1. To understand the meaning, principles, philosophy of Community Science Extension Education.
2. To know about different methods used in Extension Education.
3. To acquaint the student with different extension programs and its execution

UNITS	CONTENTS	L	T	P	TOTAL HOURS
I 15 Marks	<b>EXTENSION EDUCATION</b> <b>1.1</b> Concept, Philosophy, Objectives and Characteristics of Extension Education <b>1.2</b> Principles of Extension Education <b>1.3</b> Steps and approaches in Extension Education	12	02		14
II 15 Marks	<b>Role of Extension Education in Community Development</b> <b>2.1</b> Role of community science and its inter relationship with community development <b>2.2</b> Role & qualities of Community Science extension workers. <b>2.2</b> Different extension programme for CommunityDevelopment	15	02		17
III 20 Marks	<b>Methods of teaching in Extension Education</b> <b>3.1</b> Individual, group & mass methods: <ul style="list-style-type: none"> <li>● Individual Methods: Farm and Home visits, Office Calls, Telephone Calls, Personal letters.</li> </ul>	12	02		14

	<ul style="list-style-type: none"> <li>● Group Methods: Method Demonstration, Result demonstration, Group discussion, Field Trips, Lecture, Seminars and Workshop</li> <li>● Mass Methods: Leaflets, Circular Letter, Radio, T.V. Bulletins, News Articles, Their advantages &amp; disadvantages.</li> </ul>				
	<b>Total</b>	39	06		45
<b>Practical</b>				15	15
15 marks	1 Prepare posters: women empowerment, violence against women, child & maternal health issues, environmental pollution.				
15 Marks	2 Prepare a project report within one thousand words on any one of the above Issues.			15	15
	<b>Total</b>	39	06	30	75

(L= Lecture, T= Tutorial, P= Practical, M= Marks)

**MODE OF IN-SEMESTER ASSESSMENT:**

**20 Marks**

1. One internal Examination

**10 Marks**

2. Others(Any one) -

**10 Marks**

○ Group Discussion

○ Seminar Presentation on any of the relevant topics.

○ Assignment on any of the relevant topics.

**LEARNING OUTCOMES:** After the learning of the course, the learner will be able to –

1. Up skilling the people at different levels as per their socio-economic structure.
2. Extension work will enhance the qualities of different organizations. the etc.
3. Widens the scope in pursuing Government and Non-Government jobs/Ventures

**Suggested readings (latest edition):**

- 1.Extension and communication Management, Dr. Jitendra Chauhan, Kushal
- 2.Publication.
- 3.Introduction to extension education S.V Supe- Oxford and IBH Publishing.
- 4.Education and Communication for development. O.P Dahama, O.P Bhatnagar. Oxford & IBH Publishing Co.PVT LTD.4.
5. Education and Communication–V.K. Dubey and Indira Bishnoi 5.
- 6.Extension Techniques for Rural Management - C. Satapathy&Sabita Mishra.6.
- 7.Extension Education – A. Reddy

### Detailed Syllabus of 3<sup>rd</sup> Semester GE Courses

#### B.A. / B.Sc. 3<sup>rd</sup> Semester

**Course title: Care and Well Being in Human Development**

**Course Code: GEC-3**

**Nature of Course: Generic Elective Course (GEC)**

**Total Credits: 3**

**Distribution of Marks: 80 (End Semester) + 20 (In Semester)**

**Course Objective:** The objectives of this course are:

1. To acquaint with basic concept on vulnerable periods in life.
2. To gain knowledge regarding care and well-being at different stages of life.
3. To understand about policies, services and programs for well-being of human life.

Units	Contents	L	T	P	Total Hours
I 20 Marks	Care and Human Development: 1.1 Definition, Concepts and relevance of care. 1.2 Vulnerable periods in life that require care. 1.3 Principles and components of care.	10	1	-	11
II 20 Marks	Well – Being and Human Development: 2.1 Components of well – being – physical, psychological, spiritual. 2.2 Life crisis and well – being. 2.3 Factors and experiences that promotes well-being.	10	1	-	11



5. Singhi, P. , Child health and well – being: Psychological care within and beyond hospital walls
6. Sarawati T. S., Culture, Socialization and Human Development. New Delhi.

### **Detailed Syllabus of 3<sup>rd</sup> Semester SEC Courses**

**B.A/B.Sc. 3<sup>rd</sup> semester**

**Course title: CAD IN TEXTILES AND APPAREL**

**Course Code: SEC-3**

**Nature of Course: Skill Enhancement Course (SEC)**

**Total Credits: 3 (Theory 2, Practical 1)**

**Distribution of Marks: Theory 60 (End semester) + 10 (In semester)**

**Practical 20 (End semester) + 10 (In semester)**

**COURSE OBJECTIVE:** The objectives of this course are:

1. To learn how to create digital designs and patterns using computer-aided design software.
2. To develop an understanding of the role of computer-aided design in the textile and apparel industry.
3. To learn the process of creating digitalization of motifs and design through CAD.

<b>UNITS</b>	<b>CONTENTS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Total Hours</b>
I 15 Marks	<b>1. Basics of Design Software</b> 1.1 Corel Draw	12	02		14

	1.2 Adobe Photoshop				
II 15 Marks	<b>2. CAD in Apparel Design</b> 2.1 Basics of TukaCAD/Tukatech software 2.1.1 Basics of Pattern making 2.1.2 Grading 2.1.3 Layouts 2.1.4 Marker making	15	02		17
III 20 Marks	<b>3. CAD in Textile Design</b> 3.1 Colour graphics and colour harmonies 3.2 Motif Development 3.3 Placements 3.4 Usage in Textile Design	12	02		14
		39	06		45
IV 15 Marks  15 Marks	<b>1. Basics of Design Software</b> <b>1.1 Corel Draw</b> <b>1.2 Digitalization of traditional motifs and design of different communities through CAD</b>			15  15	15  15
	<b>Total</b>	39	06	30	75

(L= Lecture, T= Tutorial, P= Practical, M= Marks)

**MODE OF IN-SEMESTER ASSESSMENT:**

**At least 60% of the experiments must be performed from each unit.**

**Mode of In-semester assessment:**

1.Viva-voce:

**(Marks 10)**

2.Attendance / Laboratory performance / Notebook:

**(Marks 10)**

**Mode of End-semester assessment:**

Examination on laboratory experiments:

**(Marks 80)**

Two experiments (not more than one from a single unit) from the list to be performed.

**LEARNING OUTCOMES:** After the completion of the course, the learner will be able to:

1. Learning how to create digital designs and patterns using computer-aided design software.
2. Developing an understanding of the role of computer-aided design in the textile and apparel industry.
3. Learning how to use computer-aided design software to create technical drawings and specifications.

**Suggested readings (latest edition):**

1. Computer-Aided Design and Manufacturing: A Textile-Apparel Perspective by Stephen A. published by Springer.
2. Computer Technology for Textiles and Apparel by RoshanShishoo ,published by Wood head Publishing Limited.
3. Computer Technology for Textiles and Apparel by J Hu (published by Woodhead Publishing Limited.
4. Computer-aided design—garment designing and patternmaking by R Padhye , published by Woodhead Publishing Limited.
5. Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM) of Textile Products by L Hunter , published by Woodhead Publishing Limited.

