



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

Course Type	Course Code	Course Title	Teaching-Learning Scheme	Total Notional Hours	Course credits
			L-P-T		
DSC	UH07HMAFN01	Principles and Applications of Instruments and Techniques	4-0-1	120	04

• Course Learning Outcomes (CLOs)

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

CLO1: Describe the principles of spectroscopic techniques including colorimetry, photometry, fluorimetry, atomic absorption and IR spectroscopy used in food and nutrition analysis.

CLO2: Explain the principles and applications of chromatographic techniques such as paper chromatography, TLC, HPTLC, GC and HPLC.

CLO3: Apply electrophoretic and separation techniques (PAGE, SDS-PAGE, agarose gel electrophoresis) in biochemical and food analysis.

CLO4: Analyse the working principles and applications of modern analytical instruments including ELISA, PCR, RT-PCR, centrifuge, texture analyzer and electron microscope.

CLO5: Evaluate the role of analytical instruments in qualitative and quantitative assessment of food components and research applications.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	Spectroscopy: Colorimetry, photometry, fluorimetry, atomic absorption spectroscopy, spectrophotometry, infrared spectroscopy and applications	CL, ICT, CBL	CLO1
II	Chromatography: Principles, Paper chromatography, TLC, HPTLC, Column chromatography, Gas chromatography (GC), High Performance Liquid Chromatography (HPLC)	CL, PBL,	CLO2
III	Electrophoresis & Instruments: PAGE, SDS-PAGE, 2D electrophoresis, agarose gel electrophoresis; Instruments – texture analyzer, food color measurement, isotope techniques, microtome, centrifuge	CL, Seminars	CLO3, CLO4
IV	Advanced Techniques: ELISA, PCR, RT-PCR, gel documentation system, pH meter, titration, electron microscope, computer applications in analysis	CL, ICT	CLO4, CLO5



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

• Assessment Methodologies

(A) Internal Assessment

a. Internal Formative assessment

- (a) Assignment, Self-learning and Terms work
- (b) Seminar/Presentation
- (c) Rubric

b. Internal Summative Assessment

- (a) Mid-term tests
- (b) End of Term Examination
- (c) Laboratory performance
- (d) Viva-voce

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned CLOs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1	30	2	1	11	14
II	CLO2	32	2	1	11	14
III	CLO3, CLO4	28	2	1	08	11
IV	CLO4, CLO5	30	2	1	08	11
		120	08	04	38	50

• Assessment and Evaluation

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	Seminars, Assignments, Quizzes, Class Regularity,	50
2	End-Semester Examination	Written Exam/Practical Exam Project Evaluation (Report, Presentation, Viva)	50



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

• Suggested Learning Materials Books:

Sr. No.	Title	Author(s)	Edition/Year	Publisher
1	Food Analysis	Suzanne S. Nielsen	5th Edition, 2017	Springer
2	Principles of Instrumental Analysis	Douglas A. Skoog, F. James Holler, Stanley R. Crouch	6th Edition, 2007	Brooks/Cole (Cengage Learning)
3	Handbook of Analysis of Active Compounds in Functional Foods	Leo M.L. Nollet, Fidel Toldrá	1st Edition, 2012	CRC Press (Taylor & Francis)
4	Thin Layer Chromatography: A Laboratory Handbook	Egon Stahl, M.R.F. Ashworth	2nd Edition, 1990	Springer
5	Non-destructive Evaluation of Food Quality	K. Irudayaraj, C. Joseph	1st Edition, 2013	Wiley-Blackwell
6	Handbook of Dairy Foods Analysis	Leo M.L. Nollet	1st Edition, 2014	CRC Press (Taylor & Francis)

• Online Resources (Open Source)

Sr. No.	Description of Resource(s)	Weblink
1	e-PG Pathshala modules on Food Analysis and Instrumentation	https://epgp.inflibnet.ac.in
2	Spectrophotometry and analytical techniques (ScienceDirect resources)	https://www.sciencedirect.com
3	Journal of Chromatography B (Research articles on separation techniques)	https://www.sciencedirect.com/journal/journal-of-chromatography-b
4	FAO guidelines on food analysis and quality control methods	https://www.fao.org



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

Course Type	Course Code	Course Title	Teaching-Learning Scheme	Total Notional Hours	Course credits
			L-P-T		
DSC	UH07HMAFN02	Principles of Bio-Chemistry	4-0-1	120	04

- **Course Learning Outcomes (CLOs)**

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

CLO1: Describe the structure and functions of prokaryotic and eukaryotic cells, including cellular organelles and division processes.

CLO2: Explain the chemistry and metabolic pathways of carbohydrates and their role in energy metabolism.

CLO3: Discuss the chemistry, classification, and metabolism of lipids in relation to physiological functions.

CLO4: Analyse the structure, function, and metabolism of proteins along with enzyme classification, kinetics, and regulation.

CLO5: Evaluate the integration of metabolic pathways and their relevance to nutritional disorders and physiological regulation.

Unit	Course Content	Learning Pedagogies	CLO(s)
I	Cell Biology: Prokaryotic vs eukaryotic cells, cell membrane, structure and functions of organelles, cell division (mitosis, meiosis), differentiation, proliferation, cell fractionation	CL, ICT Enabled Learning, CBL	CLO1
II	Carbohydrates: Structure, classification, digestion, absorption, metabolism (glycolysis, TCA cycle, glycogenesis, glycogenolysis)	CL, PBL	CLO2
III	Lipids: Classification, structure, digestion, absorption, β -oxidation, lipid metabolism, physiological roles	CL, CBL	CLO3
IV	Proteins & Enzymes: Amino acids, protein structure, metabolism; enzymes – classification, properties, kinetics, inhibitors, coenzymes, isoenzymes	CL, Research-oriented learning	CLO4, CLO5

- **Assessment Methodologies**

(A) Internal Assessment

a. Internal Formative assessment

(a) Assignment, Self-learning and Terms work



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

(b) Seminar/Presentation

(c) Rubric

b. Internal Summative Assessment

(a) Mid-term tests

(b) End of Term Examination

(c) Laboratory performance

(d) Viva-voce

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned CLOs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1	30	1	1	12	14
II	CLO2	32	1	1	10	12
III	CLO3	28	1	1	10	12
IV	CLO4, CLO5	30	1	1	12	14
		120	04	04	44	50

• Assessment and Evaluation

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	Seminars, Assignments, Quizzes, Class Regularity,	50
2	End-Semester Examination	Written Exam/Practical Exam Project Evaluation (Report, Presentation, Viva)	50

• Suggested Learning Materials Books:

Sr. No.	Title	Author(s)	Edition/Year	Publisher
1	Lippincott's Illustrated Reviews: Biochemistry	Richard A. Harvey, Pamela C. Champe, Denise R. Ferrier	7th Edition, 2019	Wolters Kluwer
2	Textbook of Biochemistry for Medical Students	D. M. Vasudevan, S. Sreekumari, Kannan Vaidyanathan	8th Edition, 2016	Jaypee Brothers
3	Lehninger Principles of Biochemistry	David L. Nelson, Michael M. Cox	6th Edition, 2017	W.H. Freeman
4	Essentials of Biochemistry	Pankaja Naik	2nd Edition, 2017	Jaypee Brothers
5	Biochemistry	Jeremy M. Berg, John L. Tymoczko, Gregory J. Gatto Jr., Lubert Stryer	8th Edition, 2015	W.H. Freeman



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

- **Online Resources (Open Source)**

Sr. No.	Description of Resource(s)	Weblink
1	e-PG Pathshala – Biochemistry Modules	https://epgp.inflibnet.ac.in
2	NPTEL Biochemistry Courses	https://nptel.ac.in
3	Khan Academy – Biochemistry	https://www.khanacademy.org
4	PubMed – Biochemistry Research Articles	https://pubmed.ncbi.nlm.nih.gov



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

Course Type	Course Code	Course Title	Teaching-Learning Scheme	Total Notional Hours	Course credits
			L-P-T		
DSC	UH07HMAFN03	Practical based on Principles and Applications of Instruments and Techniques and Principles of Bio-Chemistry	0-8-0	120	04

• Course Learning Outcomes (CLOs)

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

CLO1: Prepare standard solutions and reagents required for analytical experiments in food and nutrition laboratories. Apply spectroscopic techniques such as spectrophotometry and fluorometry for qualitative and quantitative analysis.

CLO2: Perform chromatographic techniques including paper chromatography, adsorption chromatography and thin layer chromatography for separation of biomolecules. Demonstrate electrophoretic techniques for separation of proteins and biomolecules. Evaluate food quality parameters using analytical instruments such as colorimeter, texture analyzer and pH meter.

CLO3: Prepare reagents and perform qualitative and quantitative analysis of carbohydrates in food and biological samples. Determine physicochemical properties of lipids including saponification value, iodine value, peroxide value and acid value. Analyse proteins using biochemical methods such as serum protein estimation and Lowry method.

CLO4: Perform enzyme kinetics experiments to determine optimum pH and temperature conditions. Evaluate biochemical parameters such as cholesterol and interpret results in relation to nutritional status.

Unit	Course Content	Learning Pedagogies	CLO(s)
I	Determination of λ max of a compound; Verification of Beer-Lambert's law; Acid-base titration using pH meter. Use of fluorometer for fluorescent compounds (riboflavin); Spectrophotometric analysis	Laboratory Practicals	CLO1
II	Separation techniques: Paper chromatography (amino acids), adsorption chromatography (β -carotene), Thin Layer Chromatography (lipids). Electrophoresis (serum proteins); Measurement of color and texture of food; Visit to advanced research laboratory	Laboratory Practicals	CLO2
III	Qualitative and quantitative analysis of carbohydrates; Estimation of starch, Determination of lipid constants: saponification value, iodine value, peroxide value, acid value, Reichert-Meissl (R.M.) value.	Laboratory Practicals	CLO3



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

IV	Protein analysis: Total serum protein, albumin, globulin, A/G ratio; Estimation of cellular protein by Lowry method, Enzyme kinetics (optimum pH and temperature); Quantitative estimation of cholesterol	Laboratory Practicals	CLO4
----	---	-----------------------	------

• Assessment Methodologies

(A) Internal Assessment

a. Internal Formative assessment

- Assignment, Self-learning and Terms work
- Seminar/Presentation
- Rubric

b. Internal Summative Assessment

- Mid-term tests
- End of Term Examination
- Laboratory performance
- Viva-voce

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned CLOs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/Analyse & above (A)	
I	CLO1	30	1	1	12	14
II	CLO2	32	1	1	10	12
III	CLO3	28	1	1	10	12
IV	CLO4	30	1	1	12	14
		120	04	04	34	50

• Assessment and Evaluation

Sr. No.	Title	Author(s)	Edition/Year	Publisher
1	Food Analysis	Suzanne Nielsen	3rd Edition, 2010	Springer, New York
2	Official Methods of Analysis of AOAC International	Sidney Williams (Editor)	17th Edition, 2000	AOAC International
3	A Manual of Laboratory Techniques	Narasinga Rao Raghuramulu, Kalyanasundaram Nair, Shanta Kalyanasundaram	2nd Edition, 2003	National Institute of Nutrition, Hyderabad
4	Biochemical Methods	S. Sadasivam, A. Manickam	3rd Edition, 2008	New Age International
5	Official Methods of Analysis of AOAC International	William Horwitz (Editor)	18th Edition, 2005	AOAC International



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

6	A Manual of Laboratory Techniques	Narasinga Rao Raghuramulu, Kalyanasundaram Madhavan Nair, Shanta Kalyanasundaram	2nd Edition, 2003	National Institute of Nutrition, Hyderabad
---	-----------------------------------	--	-------------------	--

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	Class Regularity, Active participation in executing practicals, Internal practical exam	50
2	End-Semester Examination	Written Exam/Practical Exam, Viva	50



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

Course Type	Course Code	Course Title	Teaching-Learning Scheme	Total Notional Hours	Course credits
			L-P-T		
DSC	UH07HMAFN04	Programme for Rural and Urban Development	2-0-1	60	02

• Course Learning Outcomes (CLOs)

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

CLO1: Evaluate employment generation programmes and beneficiary-oriented rural development programmes in terms of their effectiveness, implementation, and impact on improving livelihoods.

CLO2: Evaluate the concept and challenges of urbanization, and assess the effectiveness of urban development policies, programmes, and institutional mechanisms.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	Rural Development a) Concept & Definition of Rural Development, Problems in Rural Development: Poverty, Housing, Health, Sanitation, Need for Rural Development b) Historical evolution of the concept of Rural Development in the Indian Context c) Poverty Alleviation and Employment Generation Programmes-National Social Assistance Programme (NSAP) d) Rural Development programme – Pradhan Mantri Awaas Yojana-Grameen (PMAY-G), National Rural Health Mission (NRHM), Rural Development Programmes for SC, ST and Underprivileged Group	CL, LMS-based Tasks, Digital Resources, Discussions on the presentation by students related to their assignments, Literature Review	CLO 1
II	Urban Development a) Definition, Meaning & Concept of Urban Community, Characteristics of Urban Community b) Urbanization – concept, causes & problems, Consequences of rapid urbanization c) Urban development policies and programmes in the Five Year Plans- Swachh Bharat Mission Urban (SBM), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart Cities Heritage City Development and Augmentation Yojana (HRIDAY), Pradhan Mantri Awas Yojana-Housing for All (PMAY-HFA), Shyama Prasad Mukherji, National Urban Mission (NRuM)	CL, LMS-based Tasks, Digital Resources, Discussions on the presentation by students related to their assignments, Literature Review	CLO 2



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

• Assessment Methodologies

(A) Internal Assessment

a. Internal Formative assessment

- (a) Assignment, Self-learning and Terms work
- (b) Seminar/Presentation
- (c) Rubric

b. Internal Summative Assessment

- (a) Mid-term tests
- (b) End of Term Examination
- (c) Laboratory performance
- (d) Viva-voce

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1	30	2	2	10	14
II	CLO2	30	2	2	7	11
		60	04	04	17	25

• Assessment and Evaluation

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	Seminars, Assignments, Quizzes, Class Regularity,	50
2	End-Semester Examination	Written Exam/Practical Exam Project Evaluation (Report, Presentation, Viva)	50

• Suggested Learning Materials Books:

Sr. No.	Title	Author(s)	Edition/ Year	Publisher
1	Education and communication for development	Dahama, O.P., & Bhatnagar, O.P.	2nd Edition, 1987	New Delhi: Oxford and IBH publishing co. Pvt. Ltd.
2	Rural Development- Programmes and Strategies	Desai, Vasant	2nd Edition, 2020	Himalaya Publishing House, Mumbai



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

- Online Resources (Open Source)

Sr. No.	Description of Resource(s)	Weblink
1	Policy documents, and documents related to various urban development programmes	http://urbanindia.nic.in ; http://mhupa.gov.in ; http://jnnurm.nic.in)
2	Appraisal of Jawaharlal Nehru National Urban Renewal Mission Final Report – Volumes I & II	(http://jnnurm.nic.in/wp-content/uploads/2012/06/Appraisal-of-JnNURM-Final-Report-Volume-I-.pdf http://jnnurm.nic.in/wp-content/uploads/2012/06/Appraisal-of-JnNURM-Final-Report-Volume-II.pdf)



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

Course Type	Course Code	Course Title	Teaching-Learning Scheme	Total Notional Hours	Course credits
			L-P-T		
DSC	UH07HMAFN05	Practical based on Programme for Rural and Urban Development	0-4-0	60	02

• Course Learning Outcomes (CLOs)

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

CLO1: Students will be able to **apply field-based methods to identify and analyze issues related to rural and urban communities.**

CLO2: Students will be able to **analyze government development programmes in terms of their objectives, implementation, and impact.**

CLO3: Students will be able to **plan, design, and execute community awareness programmes using appropriate communication strategies.**

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	Field Work and Survey (Rural/Urban Area) a) Visit to a rural or urban community, such as low-income group residents, slum areas, or villages to collect information regarding problems faced (housing, sanitation, health, employment, etc.) b) Observation of available basic facilities and living conditions c) Preparation of a field visit report with observations and suggestions	Field Visit, PBL, Collaborative Learning, Experiential Learning	CLO 1
II	Case Study Analysis a) Study a government programme (e.g., PMAY, AMRUT, NRLM, SBM) b) Analyze objectives, implementation, and impact c) Present findings in class	Research-Oriented Learning, Collaborative Learning	CLO 2
III	Planning, design, and execution of community awareness programmes on issues related to sanitation, housing, and health, including development of communication teaching aids such as charts, posters, slogans, and digital content, along with awareness activities for community engagement.	Experiential Learning ,	3



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

• Assessment Methodologies

(A) Internal Assessment

a. Internal Formative assessment

- (a) Assignment, Self-learning and Terms work
- (b) Seminar/Presentation
- (c) Rubric

b. Internal Summative Assessment

- (a) Mid-term tests
- (b) End of Term Examination
- (c) Laboratory performance
- (d) Viva-voce

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1	20	1	1	7	9
II	CLO2	20	-	1	7	8
III	CLO3	20	-	1	7	8
		60	01	03	21	25

• Assessment and Evaluation

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	Practical work during classes, Class Regularity, End-of-semester internal practical exam	50
2	End-Semester Examination	Practical Exam	50

• Suggested Learning Materials Books:

Sr. No.	Title	Author(s)	Edition/ Year	Publisher
1	Education and communication for development	Dahama, O.P., & Bhatnagar, O.P.	2nd Edition, 1987	New Delhi: Oxford and IBH publishing co. Pvt. Ltd.
2	Rural Development- Programmes and Strategies	Desai, Vasant	2nd Edition, 2020	Himalaya Publishing House, Mumbai



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

- Online Resources (Open Source)

Sr. No.	Description of Resource(s)	Weblink
1	Policy documents, and documents related to various urban development programmes	http://urbanindia.nic.in ; http://mhupa.gov.in ; http://jnnurm.nic.in)
2	Appraisal of Jawaharlal Nehru National Urban Renewal Mission Final Report – Volumes I & II	(http://jnnurm.nic.in/wp-content/uploads/2012/06/Appraisal-of-JnNURM-Final-Report-Volume-I-.pdf http://jnnurm.nic.in/wp-content/uploads/2012/06/Appraisal-of-JnNURM-Final-Report-Volume-II.pdf)



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

Course Type	Course Code	Course Title	Teaching-Learning Scheme	Total Notional Hours	Course credits
			L-P-T		
DSC	UH07HMAFN06	On the Job Training (OJT)	0-12-0	180	06

• Course Learning Outcomes (CLOs)

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

CLO1: Apply clinical nutrition principles and dietary management techniques effectively in hospital settings **OR** food production principles to ensure health and safety standards.

CLO2: Demonstrate practical skills in food handling, quality control, and regulatory compliance relevant to hospitals **OR** food industries **OR** pharmaceutical companies **OR** dairy sectors.

CLO3: Develop professional communication and teamwork skills essential for multidisciplinary collaboration in clinical, industrial, and regulatory contexts during on-the-job training.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	Students will undergo four weeks of training with experiential learning through hospitals/ food industries/ pharmaceutical companies/ dairy sector, under the supervision of a faculty coordinator (From the department) and a mentor (OJT providing organization).	Case-Based Learning (CBL), Problem-Based Learning (PBL), Industrial Visit/Field Visit/Institutional Visit, Experiential Learning, Inquiry-Based Learning	CLO 1 CLO2 CLO3

• Assessment Methodologies

(A) Internal Assessment

a. Internal Formative assessment

- Presentation
- Viva-voce
- Attendance

b. Internal Summative Assessment

- Report Writing*

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned CLOs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1 CLO2 CLO3	180	--	--	--	150
		180	--	--	--	150



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

[Foods and Nutrition] Semester-VII

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Marks
1	Internal Evaluation	Attendance	10
		Report writing	35
		Presentation	20
		Viva-voce	10
		Total	75
2	External assessment	Evaluation report provided by Mentor (OJT providing organization)	75

***OJT report structure:**

1. Cover page
2. Certificate
3. Acknowledgment
4. Table of contents
5. Introduction
6. Objectives of OJT
7. Learning experience
8. Learning outcomes
9. Conclusion/ summary
10. Attachment (if necessary)