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Self-Assessment Report
Bachelor of Human Nutrition and Dietetics

2023-2024

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Preface

The Arid Institute of Sciences (AIS) located in Mandi Bahauddin, Punjab, is established with the premise of providing affordable quality education to the youth. As an affiliated institute of Pir Mehr Ali Shah Arid Agriculture University Rawalpindi (PMAS-AAUR) ranked at 8th among all Pakistani Universities and 1001+ among the world universities, AIS aspires to excel in the field of Nutritional Sciences. In order to realize our mission, AIS is committed to providing quality education through highly qualified and motivated faculty, excellent infrastructure and state-of-the-art facilities. This is a young, innovative, and enterprising business school enroots to compete with the foremost management schools of the country as well as to compete with international business schools. The Institute is dedicated to its unique approach (at least in the region) of providing management education based in cutting-edge research and comprehensive training. Unlike conventional academic institutes, AIS broadens its educational focus in response to new trends in the developing field of management. Based on the social values of integrity, honesty, professional excellence and a broader vision of life, the Institute aims to provide an educational experience that transform its students into business leaders at par with international managers, executives, and entrepreneurs.

AIS Vision and Mission

Vision

To become a nationally recognized institute by providing an affordable, high-quality research and sustainable learning environment, while propelling the country's economy forward through professionals.

Mission

Arid Institute of Sciences aims to inspire, prepare and empower students by providing advanced educational experience to foster critical thinking and promote modern technology to transform individuals into competent professionals with compassionate minds and moral values.

Organizational Structure

The Department of Human Nutrition and Dietetics is the part of AIS whereas, AIS is one of the affiliated institutes of Arid Agriculture University Rawalpindi. The overall organizational structure is shown in Figure 1.

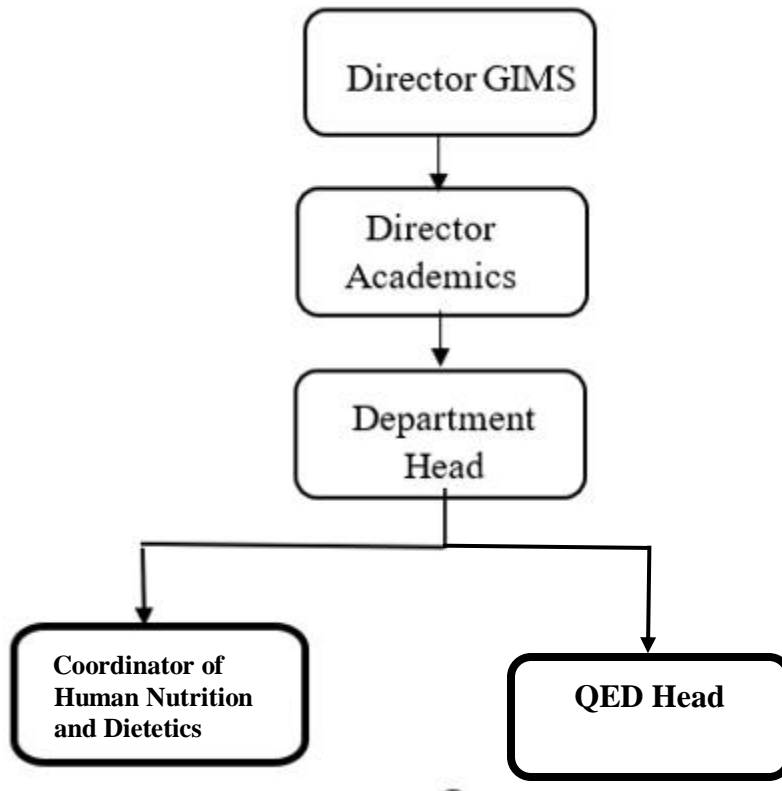


Figure 1: Organization Overall Flow

Program Delivery Mode and Location

The Department of Bioscience offers the BS-HND Program courses during the weekdays between the hours of 08:30 am and 04:30 pm on campus, Mandi Bahauddin. Courses are generally offered in fall and spring semesters. Selected courses are offered during the summer semester. Most of the courses are delivered in the lecture format and there are Lab component of some core courses. In addition to the lectures, practical laboratory work is also part of many

courses, allowing students to perform practical to get on-hand skills for labs problems. A dedicated, 5 credit hour final year internship, is carried out by students during the eighth semester.

Quality Enhancement Department (QED)

AIS, as an affiliated institute, believes in high quality of education and has a stringent system of quality management in place. Several layers of quality enhancement are part of this overall system. The authorities and responsibilities of all layers of quality enhancement department are covered in AIS statutes and policies. A Quality Assurance (QA) directorate is functioning at the AAUR level and is responsible for overlooking and ensuring the quality of all Programs offered at AIS. AIS has established internal Quality Enhancement Department (QED) in 2021 to carry out periodic audits of degree Programs to ensure that they meet highest standards of quality. The institute Curriculum Review Committee (ICRC) also functions at the institute level and send their reports to AAUR respective Department Board of Studies (DBS) are responsible for discussing and finalizing matters regarding a Program's quality, necessary support and data is provided by Academics Branch of the department as well as by the Examination Cell.

CRITERION 1 PROGRAM MISSION OBJECTIVES AND OUTCOMES

Criterion 1 Program Mission Objectives and Outcomes

1.1 BS-HND Program Vision and Mission

BS-HND's Vision

To provide students with a curriculum that spans the range of Nutritional science, from molecules to organisms to populations; to facilitate research possibilities; and to offer students practical experiences and training in public health, nutrition, and clinical dietetics.

BS-HND's Mission

To create community, public health, and clinical sector nutrition professionals. To educate and skill the students in duration of bachelor's in human nutrition and dietetics in every aspect of nutrition and health to compete the hidden challenges, contribute to public health and exploration of novel foods in modern nutrition research era. High-impact and high-quality teaching, training, and research mentoring are provided to undergraduates in the human nutrition and dietetics program. Graduates will be able to provide high-quality, research-oriented, and unique interventions to promote changes in dietary habits and food choices to improve the health of people, families, and communities. Several communities, professional, and government organizations will benefit from the graduates' contributions to academic support, professional assistance, and volunteer aid.

Standard 1-1: The program must have documented measurable objectives that support faculty and institution vision mission statements.

1.2 BS-HND Program Educational Objective

The Human Nutrition and Dietetics program aims at developing the student's intellectual ability, analytical thinking, and practical skills through an appropriate blend of theory and practice. The program assists the students in understanding and developing unique professional qualities required for a changing and dynamic food and public health environment. The four program educational objectives (PEOs), as given below, form the basis of the Department of the BS-HND at AIS. Within few years of graduation, the students with bachelor's in Human Nutrition and Dietetics are expected to attain the following.

1. Develop critical thinking, problem-solving abilities and competence in nutritional education and health related issues, resulting in successful career.

2. Develop written and oral communication skills participating in efforts to address societal and technical / business associated health and food security challenges.
3. Develop global awareness about food insecurities and appreciation for solution to health issues related to cultural diversity and lack of awareness.
4. Enhancing their professional development and technical knowledge in food industries, hospital setups and clinical specialization for different pathological conditions through proper clinical internship trainings.

1.2.1 Strategic Plan to Work out the Measurable Objectives

1. To develop and deliver a much broader and up-to-date teaching material that is interactive, understandable and reasonably for the award of the degree.
2. Formulation and consistent revision of curriculum involving core subjects, elective subjects, specialized areas, The technical labs and study tours.
3. The conductance of general and specialized lab-work for achieving competence with food industries, hospital setup experiences.
4. We orientate Faculty development programs to affect the learning process of students as well as faculty itself and quality of education.
5. Industry and academia collaborate to introduce our students to the practical implementation of nutritional knowledge in clinical and community setup/ public health setups

1.3 Consistency of PEOs with Vision and Mission of AIS, Mission of BS-HND Program

The PEOs of the BS Human Nutrition and Dietetics are consistent with the vision and mission of AIS and the mission of BS Program.

Table 1: Consistency of PEOs with Vision and Mission of AIS, Mission of BS-HND

PEO No	AIS Vision	AIS Mission	Program Mission
1 (Nutritional Science knowledge and competence)	✓	✓	✓
2 (Interpersonal and Practical competence)	✓	✓	✓
3 (Environment, social, individual and teamwork)	✓	✓	✓
4 (Research and continuous learning)	✓	✓	✓

1.4 Assessment of Program Educational Objectives (PEOs)

A minimum attainment level for each PEO has been defined along with its method of measurement. The measurement of PEO is carried out using indirect assessment tools. A single PEO has multiple performance indicators. The details of performance indicators and their measurement methods are listed in Annexure A and B. In case, multiple survey questions are attributed to the calculation of a single KPI, equal weightage is given to each question. All KPIs related to a PEO must be attained to achieve the relevant PEO.

Table 2: Assessment of Program Educational Objectives (PEOs)

Program Educational Objective		How Measured	When to Measured	Key Performance Indicators (KPI)	Improvement Needed
PEO 1	Develop critical thinking, problem-solving abilities and competence in nutritional education and health related issues, resulting in successful career	The student's attainment in different organizations for internships and activities	End of every academic session After 2 years of student during graduation	42% students secured participation in observatory internships in different hotels and hospital setups based on agreement with PEO 1 after learning 2 years content.	Job fairs and guidelines to search and increase students' employment ratio. And internships in different industries, and clinical setups

PEO 2	Develop written and oral communication skills participating in efforts to address societal and technical / business associated health and food security challenges	The student performances on different events and activities in university and outdoor	End of every academic session After 1 year of student during graduation	25% or more of the graduates are at middle-level management. 40% or more of the graduates are involved in an internship related to core subjects' i-e food processing industries, meal management in hotels, clinical observations in hospital setups.	Periodically arrange the training sessions for students to write CV, report writing, and portfolio creating. Department should arrange more training sessions, seminars and study tours
PEO 3	1. Develop global awareness about food insecurities and appreciation for solution to health issues related to cultural diversity and lack of awareness.	100% students were involved in public health awareness and nutritional awareness camps.	End of every academic session After 1 year of student graduation	100% students were involved in community and public health nutrition awareness camps and activities. 75% or more employers agreed students are good team players in decision makers in their work field.	Increased project/case studies learning with collaboration With local industries.
PEO 4	Enhancing their professional development and technical knowledge in food industries, hospital setups and clinical specialization for different pathological conditions through proper clinical internship trainings	Assessment of student strength securing volunteer ships in different field activities	End of every academic session After 1 year of student graduation	30% or more students performed extracurricular activities related to 2 years course learnings.	.

Standard 1-2: The program must have documented outcomes for graduating students. It must be demonstrated that the outcomes support the program objectives and that graduating students are capable of performing these outcomes.

1.5 Review Process of Program Educational Objectives

Measurement of the defined PEOs will be carried out by indirect assessment methods after 1-2 years of graduation. Current data cannot be assessed as the complete assessment of PEOs will be done after graduation of 4 years duration.

The surveys will be carried out and their results will be compiled by the QED and program's coordinator. An analysis report will be presented by the Director and Director Academics to the review committee comprising Head of Department, Faculty, and QED member and program coordinators. The review committee will recommend improvements/modifications/enhancements (if required) and implementation will be carried out by department. Figure 2 depicts this process in the form of a flow chart.

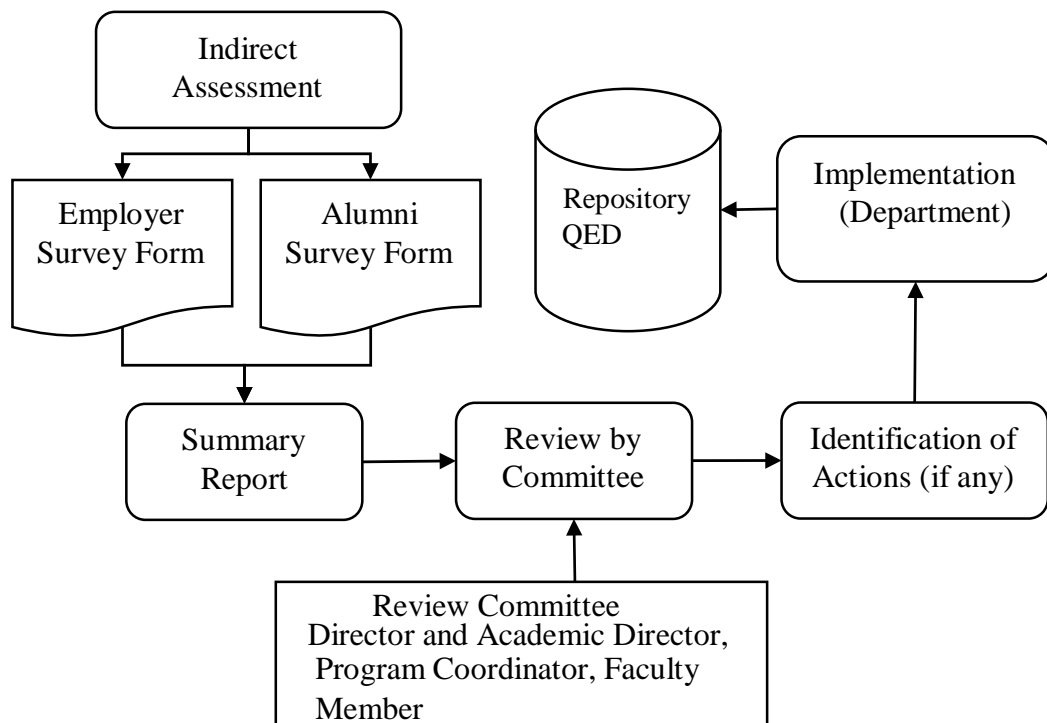


Figure 2: Flowchart of Processes Involved in Establishing and Reviewing PEO

Table 3: Relationship of Program Outcomes and Objectives

Program Objectives	Program Outcomes				
	1	2	3	4	5
1	+++	+++	+++	+++	+++
2	++	++	++	+	++
3	++	++	++	+++	+++
4	+++	++	+++	+++	+++

Rating Scale

+ = Moderately Satisfactory

++ = Satisfactory

+++ = Highly Satisfactory

1.5.1 Graduating Survey

The coordinator of the program surveys graduates on the caliber of the program. The department also conducts a survey to get input from graduates on the suitability of the curriculum.

The department of Human Nutrition and Dietetics is currently unable to conduct the graduation survey as the first session will be accomplished in 2025.

1.5.2 Alumni Survey

A retrospective evaluation of the university experience is provided by the Alumni Survey. It is intended to elicit feedback from alumni in order to analyses outcomes across a number of aspects.

The AIS is kept up to date on the whereabouts, activities and events of whole duration and will compile it at the end of session 2021-2025 of alumni through an alumni survey, hence Alumni survey is not implementable in current year.

1.5.3 Employer Survey

The program's coordinator conducts a survey of employers about the quality of the AIS graduates and their performance in field, but this criterion cannot be fulfilled right now as there is no passing batch of human nutrition and dietetics.

Standard 1-3: The results of program's assessment and the extent to which they are used to improve the program must be documented.

1.5.4 Strength of the Program

- Qualified faculty
- Coordinator helpful and address the student's problem on time
- Introduction to the new lab techniques and medical centers
- Much focus on the theoretical concepts and practical approach which help to continue further studies
- The Program enable students to understand the global health and nutritional problems and their practical solutions
- Graduates will be able to get opportunities in society as a Nutritionists, Nutrition Educationists, Nutrition Consultants, Dieticians, Public Health Nutritionists, Clinical Dieticians, Food Service Administrators, Nutrition and Health Expert

1.5.5 Weakness of the Program

- Less number of regular faculty members
- More lab time should be provided which should be independent of the time table so that students can work what work they want to do
- Lack of practice in the hospitals due to busy schedule
- Lack of awareness about profession and its importance for consultation
- Social media quacks and mishandling of opportunities effect students
- Compromised Study literature and Laboratory facilities access to institute

1.5.6 Opportunities of the Program

The knowledge in this field will be helpful to train manpower in the area of nutritional sciences to apply it in order to promote health of Pakistani population. As a dietitian trained man force will work with people to help them modify their food intake, offering practical advice to enable them to make dietary change. Development of strategies for the prevention of different metabolic disorders at national policies development levels.

1.5.7 Future Development of Program

Table 4: Features of Development

Sr. No	Observations	Action Take by Department	Status
1	Students' advisor's appointment for each batch of the program.	The department is looking for full time teachers to assign the program advisors to each batch.	In process
2	The Labs updating for smooth exaction of courses.	To update the labs and processing speed of current system, department has installed the latest equipment for nutrition profiling and practical performances	Done
3	The department is affiliated with professional hospitals and laboratories where students can get assistance as needed and perform their practicals and rotations	We are working on, currently department has engaged two local multidisciplinary hospitals with established laboratories.	Partially Achieved
4	The department is working on establishing full time students internships and final year practices framework and implementation plans	Department of nutritional sciences is fully involved with an established team to develop further plans and strategies for HND Program, internships, and final year evaluations and selection criteria's and training manuals framework which will be provided in next SAR	In process

1.6 Define and Publish Program Learning Outcomes

Six PLOs have been defined for the bachelor's in Human Nutrition and Dietetics by keeping in mind the PEOs of the Program.

1.6.1 Program Learning Outcomes

At the successful completion of BS-HND degree, the students will be equipped with the following.

1. Be proficient in one specific aspect of nutritional sciences and basic knowledge of many other contents
2. Understand the theoretical and practical implementation of techniques in fundamentals and basic nutrition knowledge
3. Be competent in theoretical and practical implementation of knowledge in different clinical setups
4. Demonstrate effective written and oral communication skills in counselling patients and medical documentations
5. Understanding concepts important to the national/international hospitals, health centers, food industries and research laboratories advancements and emerging food and health challenges

1.7 Process of Data Gathering and Results of Assessment of PLOs

PLOs of the BS-HND are evaluated for two purposes:

1. Each student has to pass all six PLOs during the four-year degree Program. This requirement is in addition to the GPA requirements of the Program. This assessment is referred to as Student PLO assessment.
2. Each PLO is also assessed to ensure the quality of the BS-HND Program. This assessment is referred to as Program PLO assessment.

1.7.1 Direct Assessment

Direct assessment of PLOs is carried out from the assessment of CLOs pertaining to a particular PLO.

1.7.2 Indirect Assessment

Indirect assessment is carried out using graduating student survey, which is collected at the time of the graduation. The graduating student survey results are only used in Program PLO assessments. KPIs for student and Program PLO assessment are given in Table, which is not available because of incompleteness of current session.

Table 5: KPIs for PLO Assessment

Program Learning Outcomes 1 to 5	Measurement Tool	Key Performance Indicator	Measurement time
Program PLO assessment	Indirect (not available)	(not available)	At the time of graduation (not available)
	Attainment via course assessments (clos, class projects, tests, activities)	80% of every cohort attains at least 65% in each PLO	At the end of each academic year and semester
Student PLO assessment 2	Attainment via course assessments, projects, assignments, etc. (Direct)	At least obtain 64% in each PLO upon completion of 2 years during graduation.	At the end of each Semester

1.8 Application of Assessment Results to Develop and Improve the Program Learning Objectives

1.8.1 Results of PLO Attainment Obtained Through Direct Assessment

1.8.1.1 PLO 1: Be proficient in one specific aspect of nutritional sciences and basic knowledge of many other contents

PLO 1: Be Competent in Theoretical and practical implementation of techniques in food processing and preservation	
Assessment Method	Minimum Level of Achievement

Attainment via direct assessments	80% of the students attain at least 90% of marks.
Graduating student survey	Not available

Table 6: Courses in Which Student Performance on PLO 1 is Assessed

S No	Semester No.	Course Code	Course Title
1	1	FST-303	Food processing and preservation
2	2	HND-403	Macro and Micro Nutrients in Human Nutrition
3	3	HND-401	Food safety and quality management

Table 7: Summary of Assessment Results for PLO1.

S No	Cohort	Fall 2023 (%age attainment)	Spring 2023 (%age attainment)	Fall 2024 (%age attainment)	Spring 2024 (%age attainment)	Overall Average (%age attainment)
1	HND-301	100	100	-	100	100
2	HND-306	-	100	100	100	100
4	HND-401	-	-	100	100	100

1.8.2 PLO 2: Understand the theoretical and practical implementation of techniques in fundamentals and basic nutrition knowledge.

PLO 2: Understand the theoretical and practical implementation of techniques in fundamentals and basic nutrition knowledge.	
Assessment Method	Minimum Level of Achievement
Attainment via direct assessments	100% of the students attain at least 90% of marks
Graduating student survey	Not available

Table 8: Courses in Which Student Performance on PLO2 is Assessed

S No	Semester No.	Course Code	Course Title
1	3	HND-407	Food Analysis and Sensory Evaluation
2	3	HND-401	Food safety and Quality management
3	4	HND-406	Diet Modelling and Counselling
4	4	HND-412	Assessment Of Nutritional Status

Table 9: Summary of Assessment Results for PLO2

S No	Cohort	Fall 2023 (%age attainment)	Spring 2023 (%age attainment)	Fall 2024 (%age attainment)	Spring 2024 (%age Attainment)	Overall Average (%age attainment)
1	HND-407	-	-	99	100	100
2	HND-401		-	100	100	100
3	HND-406	-	-	-	94	94
4	HND-412	-	-	-	97	97

Standard 1-4: The department must assess its overall performance periodically using quantifiable measures.

1.8.3 Admission Response and Percentage Admitted

Student's response towards Human Nutrition and Dietetics at GIMS has been encouraging as can be seen from the final merit list is given in Table 9.

Table 10: Student Admissions and Enrolments

Sr. No.	Intake Batch	Total Admissions offered	Total Students Admitted	Present Strength	No. of Section(s)
1	Fall 2024	50	20	14	1
2	Spring 2023	50	0	0	0
3	Fall 2023	50	22	20	1

1.8.4 Intake

The student intake for the Human Nutrition and Dietetics shown in Table 10.

Table 11: Student Intake for Enrolled in BS-HND in last 2 year

Year	2023-2024	2024-2025
Students	22	20

1.9 Alumni Survey

A survey has not been conducted. The first batch of BS-HND, AIS will be completed in 2025.

1.10 Teacher and Course Assessment

1.10.1 Teacher Evaluation

At the end of every semester teacher evaluation is conducted from the students to assess the teacher/ instructor performance and instructor attitude towards the student and classroom learning from students' perspective. Some of the teacher evaluation results are presented here. The results of teacher evaluation are shared with teacher and get feedback from teachers. In some case where QED and Department found unusual result and significant comment that shows the teacher and student had serious conflict regarding the fair assessment, classroom learning and teacher attitude towards students. QED had meeting with concerned teacher to address the issues.

1.10.2 Course Evaluation

At the end of every semester course evaluation is conducted from the students to assess the learning outcomes of course. Some of the course evaluation results are presented here. The results of course evaluations were shared with teacher and get feedback from teachers. The results of course evaluations help to identify how much the course learning objectives were achieved.

Instructor Name: Mr. Mehtab Ahmad

Course: HND-607 Research Methods in Nutrition

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 78% students were agreed instructor was prepared for class. The survey results indicate that the instructor has completed whole course and also provide the additional material apart from the course textbook. The 78% and 22% were strongly agreed and agreed respectively that instructor was available during the specified office hours and for after class consultations.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
Description	S.A	A	UC	D	S.D
The instructor is prepared for each class.	78%	22%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	78%	22%	0%	0%	0%
The instructor has completed the whole course.	78%	22%	0%	0%	0%
The instructor provides additional material apart from the textbook.	67%	33%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	67%	33%	0%	0%	0%
The instructor communicates the subject matter effectively.	78%	22%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	67%	33%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	67%	33%	0%	0%	0%
The instructor arrives on time.	78%	22%	0%	0%	0%
The instructor leaves on time.	78%	22%	0%	0%	0%
The instructor has completed all classes regularly.	78%	22%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	78%	22%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	67%	33%	0%	0%	0%
The instructor was available during the specified hours on office and after class for consultations.	78%	22%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	78%	22%	0%	0%	0%

The assignments and exams covered the materials presented in the course.	78%	22%	0%	0%	0%
The course material is modern and updated	67%	33%	0%	0%	0%
The teacher is fair in exams.	78%	22%	0%	0%	0%

S.A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S.D: (Strongly Disagree)

Instructor Name: Mr. Muhammad Bilal

Course: HND-403 Micro and Macro nutrients in Human Nutrition

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 68% students were agreed instructor was prepared for class. The survey results indicate that the instructor communicates the subject matter effectively.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	68%	32%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	68%	32%	0%	0%	0%
The Instructor has completed the whole course.	77%	23%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	64%	32%	5%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	64%	36%	0%	0%	0%
The Instructor communicates the subject matter effectively.	64%	36%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	68%	27%	5%	0%	0%
The Instructor maintains an environment that is conducive to learning.	73%	23%	5%	0%	0%
The Instructor arrives on time.	68%	27%	5%	0%	0%
The Instructor leaves on time.	73%	23%	5%	0%	0%
The instructor has completed all classes regularly.	77%	23%	0%	0%	0%

The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	59%	41%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	68%	32%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	68%	32%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	68%	27%	5%	0%	0%
The assignments and exams covered the materials presented in the course.	59%	36%	5%	0%	0%
The course material is modern and updated	77%	23%	0%	0%	0%
The teacher is fair in exams.	55%	18%	18%	9%	0%

Instructor Name: Mr. Hasham Yasir

Course: HND-611 Nutritional Deficiency Disorders

The majority of student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. However, a small ratio of students was uncertain and strongly disagree. The survey results indicate that the instructor communicates the subject matter effectively. The 100% were strongly agreed and agreed respectively that the assignments and exams covered the materials presented in the course.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	100%	0%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor has completed the whole course.	100%	0%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	89%	11%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The Instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The Instructor arrives on time.	89%	0%	11%	0%	0%

The Instructor leaves on time.	89%	11%	0%	0%	0%
The instructor has completed all classes regularly.	78%	0%	11%	11%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	100%	0%	0%	0%	0%
The teacher is fair in exams.	100%	0%	0%	0%	0%

Instructor Name: Ms. Saba Akhtar

Course:HND-404 Meal Planning and Management

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 81% students were agreed instructor was prepared for class. The survey results indicate that the instructor has completed whole course and also provide the additional material apart from the course textbook. The 63% and 38% were strongly agreed and agreed respectively that instructor was available during the specified office hours and for after class consultations.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	81%	19%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	63%	38%	0%	0%	0%
The Instructor has completed the whole course.	69%	31%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	69%	25%	6%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	75%	25%	0%	0%	0%
The Instructor communicates the subject matter effectively.	69%	31%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	69%	31%	0%	0%	0%

The Instructor maintains an environment that is conducive to learning.	75%	19%	6%	0%	0%
The Instructor arrives on time.	75%	25%	0%	0%	0%
The Instructor leaves on time.	81%	19%	0%	0%	0%
The instructor has completed all classes regularly.	75%	19%	6%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	75%	19%	6%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	63%	31%	6%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	63%	38%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	75%	25%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	75%	25%	0%	0%	0%
The course material is modern and updated	75%	25%	0%	0%	0%
The teacher is fair in exams.	56%	38%	6%	0%	0%

Instructor Name: Dr. Hammad Elahi

Course: HND-401 Human Physiology II

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class. The 96% and 4% were strongly agree and agreed respectively. The survey results indicate that the instructor communicates the subject matter effectively. The 89% and 11% were strongly agreed and agreed respectively that the assignments and exams covered the materials presented in the course

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	78%	22%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	78%	22%	0%	0%	0%
The Instructor has completed the whole course.	83%	17%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	89%	11%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	89%	11%	0%	0%	0%
The Instructor communicates the subject matter effectively.	83%	17%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	83%	17%	0%	0%	0%

The Instructor maintains an environment that is conducive to learning.	89%	11%	0%	0%	0%
The Instructor arrives on time.	67%	11%	11%	11%	0%
The Instructor leaves on time.	72%	22%	0%	6%	0%
The instructor has completed all classes regularly.	78%	17%	6%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	89%	11%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	83%	17%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	83%	11%	0%	6%	0%
The course integrates theoretical course concepts with real-world applications.	89%	11%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	89%	11%	0%	0%	0%
The course material is modern and updated	94%	6%	0%	0%	0%
The teacher is fair in exams.	78%	22%	0%	0%	0%

Instructor Name: Ms. Arshi Shehla

Course: HND-412 Assessment of Nutritional Status

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class. The 78% and 22% were strongly agree and agreed respectively. The survey results indicate that the instructor has completed the course outline. The 83% and 17% were strongly agreed and agreed respectively that Instructor maintains an environment that is conducive to learning.

The Instructor is prepared for each class.	78%	22%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	78%	22%	0%	0%	0%
The Instructor has completed the whole course.	78%	22%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	72%	22%	0%	0%	6%
The Instructor gives citations regarding current situations with reference to Pakistani context.	72%	17%	6%	0%	6%
The Instructor communicates the subject matter effectively.	72%	22%	0%	6%	0%
The Instructor shows respect towards students and encourages class participation	89%	11%	0%	0%	0%

The Instructor maintains an environment that is conducive to learning.	83%	17%	0%	0%	0%
The Instructor arrives on time.	78%	22%	0%	0%	0%
The Instructor leaves on time.	78%	22%	0%	0%	0%
The instructor has completed all classes regularly.	83%	17%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	78%	22%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	83%	11%	6%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	83%	11%	6%	0%	0%
The course integrates theoretical course concepts with real-world applications.	83%	17%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	83%	17%	0%	0%	0%
The course material is modern and updated	78%	11%	6%	0%	6%
The teacher is fair in exams.	78%	11%	0%	11%	0%

Instructor Name: Ms. Kiran Fatima

Course: HND-410 Food Microbiology

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class. The 65% and 35% were strongly agree and agreed respectively. The survey results indicate that the instructor has completed the course outline. The 65% and 24% were strongly agreed and agreed respectively that instructor maintains an environment that is conducive to learning.

The Instructor is prepared for each class.	65%	35%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	59%	41%	0%	0%	0%
The Instructor has completed the whole course.	65%	29%	6%	0%	0%
The Instructor provides additional material apart from the textbook.	71%	12%	18%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	65%	24%	12%	0%	0%
The Instructor communicates the subject matter effectively.	59%	35%	6%	0%	0%
The Instructor shows respect towards students and encourages class participation	35%	35%	6%	18%	6%

The Instructor maintains an environment that is conducive to learning.	65%	24%	12%	0%	0%
The Instructor arrives on time.	76%	24%	0%	0%	0%
The Instructor leaves on time.	76%	18%	0%	6%	0%
The instructor has completed all classes regularly.	76%	24%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	65%	24%	0%	6%	6%
The Subject matter presented in the course has increased your knowledge of the subject.	65%	18%	6%	6%	6%
The Instructor was available during the specified hours on office and after class for consultations.	65%	18%	12%	0%	6%
The course integrates theoretical course concepts with real-world applications.	71%	24%	6%	0%	0%
The assignments and exams covered the materials presented in the course.	71%	24%	6%	0%	0%
The course material is modern and updated	65%	24%	12%	0%	0%
The teacher is fair in exams.	65%	24%	6%	6%	0%

Instructor Name: Mr. Muhammad Aqib

Course: HND-504 Nutrition in Emergency

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class and demonstrate the knowledge of the subject effectively. The survey results indicate that the instructor has completed the course outline. Majority of students said that the instructor shows respect towards students and encourages class participation during whole course.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	40%	20%	20%	10%	10%
The Instructor demonstrates knowledge of the subject.	50%	40%	0%	0%	10%
The Instructor has completed the whole course.	50%	40%	0%	0%	10%
The Instructor provides additional material apart from the textbook.	50%	30%	10%	0%	10%
The Instructor gives citations regarding current situations with reference to Pakistani context.	50%	30%	10%	0%	10%
The Instructor communicates the subject matter effectively.	50%	30%	10%	0%	10%
The Instructor shows respect towards students and encourages class participation	60%	30%	0%	0%	10%

The Instructor maintains an environment that is conducive to learning.	50%	30%	10%	0%	10%
The Instructor arrives on time.	70%	20%	0%	0%	10%
The Instructor leaves on time.	70%	20%	0%	0%	10%
The instructor has completed all classes regularly.	50%	40%	0%	0%	10%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	70%	20%	0%	0%	10%
The Subject matter presented in the course has increased your knowledge of the subject.	50%	30%	10%	0%	10%
The Instructor was available during the specified hours on office and after class for consultations.	60%	30%	0%	0%	10%
The course integrates theoretical course concepts with real-world applications.	60%	30%	0%	0%	10%
The assignments and exams covered the materials presented in the course.	60%	30%	0%	0%	10%
The course material is modern and updated	70%	20%	0%	0%	10%
The teacher is fair in exams.	70%	20%	0%	0%	10%

Instructor Name: Ms. Sayeda Amina Iqbal Fatima

Course: HND-508 Nutritional Practices in Clinical Care

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class and demonstrate the knowledge of the subject effectively. The 67% and 22% response were strongly agreed and agreed respectively. The survey results indicate that the instructor has completed the course outline. All students were agreed instructor has communicated the subject matter effectively.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	67%	22%	11%	0%	0%
The Instructor demonstrates knowledge of the subject.	67%	22%	11%	0%	0%
The Instructor has completed the whole course.	67%	22%	11%	0%	0%
The Instructor provides additional material apart from the textbook.	67%	22%	11%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	67%	22%	11%	0%	0%
The Instructor communicates the subject matter effectively.	67%	22%	11%	0%	0%
The Instructor shows respect towards students and encourages class participation	67%	22%	11%	0%	0%

The Instructor maintains an environment that is conducive to learning.	78%	11%	11%	0%	0%
The Instructor arrives on time.	67%	22%	11%	0%	0%
The Instructor leaves on time.	67%	22%	11%	0%	0%
The instructor has completed all classes regularly.	67%	22%	11%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	67%	11%	22%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	78%	11%	11%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	78%	11%	11%	0%	0%
The course integrates theoretical course concepts with real-world applications.	67%	22%	11%	0%	0%
The assignments and exams covered the materials presented in the course.	67%	22%	11%	0%	0%
The course material is modern and updated	78%	11%	11%	0%	0%
The teacher is fair in exams.	78%	11%	11%	0%	0%

Instructor Name: Ms. Arshi Shehla

Course: HND-513 Public Health Nutrition

The student's response has been observed satisfactory about the completion of course, demonstration and about the provision of additional course material. The 100% were strongly agreed. All students were strongly agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
The instructor is prepared for each class.	100%	0%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The instructor has completed the whole course.	100%	0%	0%	0%	0%
The instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%

The instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The instructor starts the class on time.	100%	0%	0%	0%	0%
The instructor ends the class on time.	100%	0%	0%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The instructor was available during the specified hours for consultation.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated.	100%	0%	0%	0%	0%

Instructor Name: Ms. Isbah Inam

Course: HND-507 Nutritional Education and Awareness

The survey results show satisfactory feedback from students. 93% and 7% students agreed that instructor was prepared for each class. Majority of students agreed that course was completed, demonstration was good, and the instructor provide additional course materials. 93% and 7% students were strongly agreed and agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
The instructor is prepared for each class.	93%	7%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	79%	21%	0%	0%	0%
The instructor has completed the whole course.	79%	21%	0%	0%	0%
The instructor provides additional material apart from the textbook.	86%	14%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	93%	7%	0%	0%	0%
The instructor communicates the subject matter effectively.	93%	7%	0%	0%	0%

The instructor shows respect towards students and encourages class participation	86%	7%	7%	0%	0%
The instructor maintains an environment that is conducive to learning.	93%	7%	0%	0%	0%
The instructor starts the class on time.	86%	14%	0%	0%	0%
The instructor ends the class on time.	86%	14%	0%	0%	0%
The instructor has completed all classes regularly.	93%	7%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	79%	21%	0%	0%	0%
The subject matter presented in the course has increased your knowledge of the subject.	86%	14%	0%	0%	0%
The instructor was available during the specified hours for consultation.	93%	7%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	93%	7%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	86%	14%	0%	0%	0%
The course material is modern and updated.	86%	14%	0%	0%	0%

Instructor Name: Ms. Manahil Saud

Course: SSH-301 Ideology and Constitution of Pakistan

The survey results show satisfactory feedback from students. 100% students agreed that instructor was prepared for each class. Majority of students agreed that course was completed, demonstration was good, and the instructor provide additional course materials. A high ratio of students were strongly agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	100%	0%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor has completed the whole course.	100%	0%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The Instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%

The Instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The Instructor arrives on time.	100%	0%	0%	0%	0%
The Instructor leaves on time.	100%	0%	0%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	100%	0%	0%	0%	0%
The teacher is fair in exams.	100%	0%	0%	0%	0%

Instructor Name: Mr. Muhammad Usama

Course: IS-401 Islamic Studies

The overall survey results are satisfactory. The 80% and 20% students show positive response about provision of additional material. 90% and 10% students were strongly agreed and agreed teacher integrates theoretical course concepts with real-world applications and student said instructor maintains an environment that is conducive to learning.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	80%	20%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	80%	20%	0%	0%	0%
The Instructor has completed the whole course.	80%	20%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	80%	20%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	90%	10%	0%	0%	0%
The Instructor communicates the subject matter effectively.	80%	20%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	80%	20%	0%	0%	0%

The Instructor maintains an environment that is conducive to learning.	80%	20%	0%	0%	0%
The Instructor arrives on time.	90%	10%	0%	0%	0%
The Instructor leaves on time.	90%	10%	0%	0%	0%
The instructor has completed all classes regularly.	90%	10%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	80%	20%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	90%	10%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	90%	10%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	90%	10%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	90%	10%	0%	0%	0%
The course material is modern and updated	80%	20%	0%	0%	0%
The teacher is fair in exams.	80%	20%	0%	0%	0%

Course Evaluation

Instructor Name: Ms. Sayeda Amina Iqbal Fatima

Course: HND-303 Food Processing and Preservation

The course evaluation results are satisfactory, and it indicate that the students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. Results also indicates the students were motivated to participate in class to achieve the learning outcomes.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	100%	0%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	75%	0%	25%	0%	0%
The Instructor has completed the whole course.	75%	0%	0%	25%	0%
The Instructor provides additional material apart from the textbook.	75%	0%	0%	0%	25%
The Instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The Instructor communicates the subject matter effectively.	75%	0%	0%	0%	25%

The Instructor shows respect towards students and encourages class participation	75%	0%	25%	0%	0%
The Instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The Instructor arrives on time.	100%	0%	0%	0%	0%
The Instructor leaves on time.	75%	0%	0%	0%	25%
The instructor has completed all classes regularly.	75%	0%	0%	0%	25%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	100%	0%	0%	0%	0%
The teacher is fair in exams.	75%	0%	25%	0%	0%

Instructor Name: Ms. Arshi Shehla

Course: HND-306 Micro and Macronutrients in Human Nutrition

The course evaluation results are satisfactory, and it indicate that the students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. High proportion of students agreed that course stimulated their interest. Results also indicates the students were motivated to participate in class to achieve the learning outcomes.

Description	S. A	A	UC	D	S. D
The Instructor is prepared for each class.	61%	28%	0%	0%	11%
The Instructor demonstrates knowledge of the subject.	61%	28%	0%	0%	11%
The Instructor has completed the whole course.	61%	39%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	61%	22%	6%	0%	11%
The Instructor gives citations regarding current situations with reference to Pakistani context.	61%	22%	0%	6%	11%

The Instructor communicates the subject matter effectively.	56%	28%	6%	0%	11%
The Instructor shows respect towards students and encourages class participation	61%	28%	11%	0%	0%
The Instructor maintains an environment that is conducive to learning.	56%	28%	11%	6%	0%
The Instructor arrives on time.	61%	39%	0%	0%	0%
The Instructor leaves on time.	61%	39%	0%	0%	0%
The instructor has completed all classes regularly.	61%	33%	6%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	61%	33%	6%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	61%	28%	11%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	61%	22%	17%	0%	0%
The course integrates theoretical course concepts with real-world applications.	67%	22%	11%	0%	0%
The assignments and exams covered the materials presented in the course.	61%	28%	11%	0%	0%
The course material is modern and updated	67%	22%	0%	0%	11%
The teacher is fair in exams.	50%	33%	6%	0%	11%

Instructor Name: Mr. Hammad Elahi

Course: HND-302 Human Anatomy

The course evaluation results are satisfactory, and it indicate high ratio of 73% students were clear about the demonstration of knowledge of the subject. All students in class were agreed the course was well organized and workload was manageable.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	53%	33%	7%	0%	7%
The Instructor demonstrates knowledge of the subject.	73%	20%	7%	0%	0%
The Instructor has completed the whole course.	60%	33%	7%	0%	0%
The Instructor provides additional material apart from the textbook.	67%	20%	7%	7%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	60%	33%	7%	0%	0%

The Instructor communicates the subject matter effectively.	67%	27%	7%	0%	0%
The Instructor shows respect towards students and encourages class participation	67%	20%	13%	0%	0%
The Instructor maintains an environment that is conducive to learning.	67%	27%	7%	0%	0%
The Instructor arrives on time.	47%	20%	7%	27%	0%
The Instructor leaves on time.	47%	40%	7%	7%	0%
The instructor has completed all classes regularly.	47%	27%	7%	13%	7%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	67%	20%	13%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	67%	27%	7%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	73%	20%	7%	0%	0%
The course integrates theoretical course concepts with real-world applications.	67%	27%	7%	0%	0%
The assignments and exams covered the materials presented in the course.	60%	20%	13%	7%	0%
The course material is modern and updated	60%	27%	13%	0%	0%
The teacher is fair in exams.	60%	33%	7%	0%	0%

Instructor Name: Ms. Isbah Inam

Course: HND-406 Diet Modelling and Counselling

The overall course evaluation results are satisfactory, and it indicate 100% students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. A high proportion of students were satisfied the assessments were reasonable and timely. Most of students were agreed that classroom was satisfactory and adequate learning resources were available.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	100%	0%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor has completed the whole course.	100%	0%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%

The Instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The Instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The Instructor arrives on time.	100%	0%	0%	0%	0%
The Instructor leaves on time.	100%	0%	0%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	100%	0%	0%	0%	0%
The teacher is fair in exams.	100%	0%	0%	0%	0%

Instructor Name: Mr. Sami Rehman

Course: HND-402 General Pathology

The overall course evaluation results are satisfactory, and it indicate 63% and 13% students were agreed that teacher is prepared for each class. Majority of students in class were agreed they have participated actively in classroom and the pace of course was fine. Most students were agreed that classroom was satisfactory and adequate learning resources were available.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	63%	13%	0%	0%	25%
The Instructor demonstrates knowledge of the subject.	50%	25%	13%	0%	13%
The Instructor has completed the whole course.	63%	13%	13%	0%	13%

The Instructor provides additional material apart from the textbook.	38%	38%	13%	0%	13%
The Instructor gives citations regarding current situations with reference to Pakistani context.	50%	25%	13%	0%	13%
The Instructor communicates the subject matter effectively.	13%	38%	38%	0%	13%
The Instructor shows respect towards students and encourages class participation	13%	38%	38%	0%	13%
The Instructor maintains an environment that is conducive to learning.	13%	25%	50%	0%	13%
The Instructor arrives on time.	25%	38%	13%	0%	25%
The Instructor leaves on time.	25%	25%	25%	0%	25%
The instructor has completed all classes regularly.	25%	50%	13%	0%	13%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	63%	13%	13%	0%	13%
The Subject matter presented in the course has increased your knowledge of the subject.	50%	25%	13%	0%	13%
The Instructor was available during the specified hours on office and after class for consultations.	13%	38%	13%	25%	13%
The course integrates theoretical course concepts with real-world applications.	50%	13%	25%	0%	13%
The assignments and exams covered the materials presented in the course.	50%	13%	25%	0%	13%
The course material is modern and updated	38%	25%	25%	13%	0%
The teacher is fair in exams.	25%	13%	63%	0%	0%

Instructor Name: Mr. Shahzeb Hameed

Course: HND-410 Food Microbiology

The course evaluation results are satisfactory, and it indicate that the most of students were clear about the course objectives and outcomes. Results also indicates the students were motivated to participate in class to achieve the learning outcomes. The tutorials and material provided helped to achieve the learning outcomes of course.

Description	S.A	A	UC	D	S.D
The Instructor is prepared for each class.	100%	0%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor has completed the whole course.	100%	0%	0%	0%	0%

The Instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The Instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The Instructor arrives on time.	100%	0%	0%	0%	0%
The Instructor leaves on time.	100%	0%	0%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	100%	0%	0%	0%	0%
The teacher is fair in exams.	100%	0%	0%	0%	0%

1.11 Using Obtained Results to Improve Program Effectiveness

1.11.1 Performance Indicators for PEOs

A minimum attainment level for each PEO has been defined along with its method of measurement. The measurement of PEO is carried out using indirect assessment tools. A single PEO has multiple performance indicators. The details of performance indicators and their measurement methods are listed in Annexure A and B. In case, multiple survey questions are attributed to the calculation of a single KPI, equal weightage is given to each question. All KPIs related to a PEO must be attained to achieve the relevant PEO.

CRITERION 2: CURRICULUM DESIGN AND ORGANIZATION

Criterion 2 Curriculum Design and Organization

The curriculum of the Human Nutrition and Dietetics program developed keeping in view the guidelines provided by HEC.

2.1.1 Consistency of Program Structure and Course Contents in Development of Intellectual and Practical Skills and Attainment of PLOs

The Human Nutrition and Dietetics Program curriculum is designed to fulfil the Program learning outcomes and course learning outcomes. Each semester is of approximately 16-week duration. The Bachelor of Human Nutrition and Dietetics Program's minimum duration is four years and maximum 10 semesters two for clinical internship. The course requirements for BS Human Nutrition and Dietetics are 140 credit hours. A fulltime student is required to take courses not less than 17 credit hours of courses offered in respective semester.

2.2 Curriculum Design

The curriculum of the BS Human Nutrition and Dietetics Program was devised based on the needs of all stakeholders. The curriculum is broadly divided in nutritional and non-nutritional courses. The human nutrition domain includes fundamental courses of nutrition & dietetics core and elective courses. A comprehensive final year internship is also part of the curriculum. A number of courses include complex nutritional and dietetics courses that allow the students to apply their knowledge and critical thinking and gain an in depth understanding of theory. The elective domain contains courses are related to humanities, microbiology and medical biochemistry. These courses develop skills of pre-clinical and laboratory skills & management, team work, communication, ethical and moral responsibilities and sustainable development. The mix of nutritional and non-nutritional courses is in accordance with the national guidelines provided by the HEC.

Summary of the curriculum of BS Human Nutrition and Dietetics Program is given in Table 13.

Table 12: Curriculum Course Requirements

Domain	Knowledge Area	HEC Guidelines		BS Human Nutrition and Dietetics Program	
		Total	Overall	Total	Overall
		Credits	%	Credits	%
Non nutritional compulsory courses	General Education	10	30.71%	43	30.71%
	Stats & Biometry communication skills	21			
	Biochemistry, microbiology	22			
	Sub Total	43			
Nutritional Science	Nutritional sciences core courses	89	69.29%	89	69.29%
	Domain Supporting	8		8	
	Sub Total	97		97	
Total		140	100	140	100

Standard 2-1: The curriculum must be consistent and support the program's documented objectives.

2.3 Mapping of Courses to PLOs

Program Semester-wise mapping of courses to PLOs is given in Table 13. The course to PLO mapping is only shown for the courses that are used for assessing a particular PLO.

Table 13: Mapping of Semester-wise Courses to Program Learning Objectives

Semester No	Course Code	Course Title	Be proficient in basic nutritional sciences & Nutrients	Purpose & implementation of lab equipment's & techniques	Knowledge about clinical setup	Skills in communication and medical documentations	Outdoor, In hospital, food industry & research development
			1	2	3	4	5
1	HND-301	Fundamentals of Human Nutrition	✓				

	FST-303	Food Processing and Preservation	✓	✓		✓	✓
2	BCH-310	Introductory Biochemistry	✓	✓			
	HND-302	Human Anatomy	✓	✓	✓		
	HND-304	Human Physiology-I	✓		✓		
	HND-403	Micro and Macronutrients in Human Nutrition	✓		✓		
3	BCH-306	General Microbiology	✓	✓		✓	
	HND-401	Food Safety and Quality Management		✓			✓
	HND-403	Meal Planning and Management	✓		✓		✓
	HND-405	Human Physiology – II	✓	✓	✓		
	HND-407	Food Analysis and Sensory Evaluation		✓			✓
	BCH-306	General Microbiology	✓	✓			✓
4	HND-404	Metabolism of Nutrients	✓	✓		✓	
	HND-406	Diet Modelling and Counselling		✓	✓	✓	
	HND-408	Nutrition Epidemiology and Public Health				✓	✓
	HND-410	Food Microbiology	✓				✓
	HND-412	Assessment of Nutritional Status			✓	✓	✓
5	HND-502	Dietetics-II		✓	✓		✓
	HND-504	Nutrition in Emergency				✓	✓
	HND-506	Nutrition through Life Cycle				✓	✓
	HND-508	Nutritional Practices in Clinical Care	✓			✓	✓
	HND-510	Infant and Young Child Feeding				✓	✓
	HND-512	Medical Nutrition Therapy			✓	✓	✓
6	HND-502	Dietetics-II			✓	✓	✓

7	HND-601	Dietetics-III			✓	✓	✓
	HND-603	Food and Drug Interactions			✓	✓	✓
	HND-605	Global Food Issues			✓		✓
	HND-607	Research Methods in Nutrition					✓
	HND-609	Sports Nutrition		✓	✓	✓	
	HND-611	Nutritional Deficiency Disorders			✓		✓
8	HND-602	Internship/House job		✓	✓	✓	✓
	HND-604	Nutritional Immunology		✓	✓	✓	✓
	HND-606	Food Service Management	✓				✓
	HND-608	Nutrition Policies and Programs			✓	✓	✓

Standard 2-2: Theoretical backgrounds, problem analysis and solution design must be stressed within the program's core material.

The table below shows the categorization of courses which play vital role in building theoretical background, problem analysis and designing a solution.

Table 14: Detail of Courses Representing the Theoretical Background, Problem Analysis and Solution Design.

Element	Course Code	Course Title
	HND-301	Fundamentals of Human Nutrition
	FST-303	Food Processing and Preservation
	HND-302	Human Anatomy
	HND-304	Human Physiology-I
	HND-403	Micro and Macronutrients in Human Nutrition
	HND-407	Food Safety and Quality Management
	HND-405	Meal Planning and Management
	HND-405	Human Physiology – II
	HND-407	Food Analysis and Sensory Evaluation

Core Courses	HND-402	General Pathology
	HND-404	Metabolism of Nutrients
	HND-406	Diet Modelling and Counselling
	HND-408	Nutrition Epidemiology and Public Health
	HND-410	Food Microbiology
	HND-412	Assessment of Nutritional Status
	HND-501	Dietetics-I
	HND-503	Nutrition and Psychology
	HND-505	Food and Drug Laws
	HND-507	Nutritional Education and Awareness
	HND-509	Clinical Biochemistry
	HND-511	Functional Foods and Nutraceuticals
	HND-502	Dietetics-II
	HND-504	Nutrition in Emergency
	HND-506	Nutrition through Life Cycle
	HND-508	Nutritional Practices in Clinical Care
	HND-510	Infant and Young Child Feeding
	HND-512	Medical Nutrition Therapy
	HND-601	Dietetics-III
	HND-603	Food and Drug Interactions
	HND-605	Global Food Issues
	HND-607	Research Methods in Nutrition
	HND-609	Sports Nutrition
	HND-611	Nutritional Deficiency Disorders
	HND-602	Internship/House job
	HND-604	Nutritional Immunology
	HND-606	Food Service Management
	HND-608	Nutrition Policies and Programs
Compulsory Courses	Math-301	Mathematics-I
	SSH-301	Pakistan Studies

	ENG-301	Functional English
	SOC-301	Introduction to Sociology
	STAT-302	Statistics and Biometry
	ENG-302	Communication Skills
	BCH-310	Introductory Biochemistry
	IS/ET-302	Islamic Studies/Ethics
	BCH-306	General Microbiology
	CS-402	Introduction to computing

Standard 2-3: The curriculum must satisfy the core requirements for the program as specified by the accreditation body.

The degree of BS (HND) comprises of sufficient courses that covers Human Nutrition and Dietetics needs. Courses such as Food safety and quality management, Assessment of Nutritional status, Diet modelling and counselling, Nutrient metabolism provides Human Nutrition and Dietetics knowledge to the graduates.

Standard 2-4: The curriculum must satisfy the major requirements for the program as specified by the accreditation body

The curriculum has number of courses to fulfil a minimum number of credit hours' requirements (17 credit hours) under the category of major courses.

Standard 2-5: The curriculum must satisfy general education, arts, professional and other discipline requirements of program.

In general education category the designed curriculum offers number of courses to meet the requirement of 17 credit hours under stated category

Table 15: Courses Categories (Core, General, Major, Supporting) and their Accumulated Credit Hours

Category	Credit Hours	Accumulated Credit Hours
Human Nutrition & Dietetics-Core Courses	89	140
Major (Human Nutrition and Dietetics)-Core supporting Courses	8	
Major (Human Nutrition and Dietetics) Based Electives	22	
General Electives	10	
University Electives	21	
Total Credit Hours		140

Standard 2-6: The information technology component of the curriculum must be integrated throughout the degree program.

To enhance the general Human Nutrition and Dietetics knowledge and basic skills the curriculum included three courses of 9 credit hours,

Standard 2-7: Oral and written communication skills of the student must be developed and applied in a program.

To enhance the communication skills of students, AIS has included several general education courses as per HEC criterion.

Table 16: General Education Course

Course Code	Course Title	Credit Hours
ENG-301	Functional English	3(3-0)
ENG-302	Communication skills	3(3-0)

2.4 Course Offerings

The offered courses belong to various domains of knowledge. The details of offered courses are provided in Table 17

Table 17: Course Offering

Sem No.	Sr.No.	Course Code	Course Title	Credit Hours	Knowledge Area	Pre-requisite Courses
1	1	HND-301	Fundamentals of Human Nutrition	3(3-0)	HND-301	Nil
	2	FST-303	Food Processing and Preservation	3(2-2)	FST-303	Nil
	3	Math-301	Mathematics-I	3(3-0)	Math-301	Nil
	4	SSH-301	Pakistan Studies	2(2-0)	SSH-301	Nil
	5	ENG-301	Functional English	3(3-0)	ENG-301	Nil
	6	SOC-301	Introduction of Sociology	3(3-0)	SOC-301	Nil
			Total Credit Hours	17 (16-2)		
Sem No.	Sr. No.	Course Code	Course Title	Credit Hours	Knowledge Area	Pre-requisite Courses
2	1	BCH-310	Introductory Biochemistry	3(2-2)	BCH-310	Nil
	2	HND-302	Human Anatomy	3(2 -2)	HND-302	Nil
	3	HND-304	Human Physiology-I	3(2-2)	HND-304	Nil
	4	HND-403	Micro and Macronutrients in Human Nutrition	3(3-0)	HND-403	Nil
	5	STAT-302	Statistics and Biometry	3(3-0)	STAT-302	Nil
	6	ENG-302	Communication Skills	3(3-0)	ENG-302	Nil
			Total Credit Hours	18 (15-6)		
Sem No.	Sr. No.	Course Code	Course Title	Credit Hours	Knowledge Area	Pre-requisite Courses
3	1	BCH-407	General Microbiology	3(2-2)	BCH-407	Nil
	2	HND-401	Food Safety and Quality Management	3(3-0)	HND-401	Nil
	3	HND-403	Meal Planning and Management	3(2-2)	HND-403	Nil
	4	HND-405	Human Physiology – II	3(3-2)	HND-405	Nil

	5	HND-407	Food Analysis and Sensory Evaluation	3(2-2)	HND-407	Nil
	6	BCH-407	General Microbiology	3(2-2)	BCH-407	Nil
	7	IS/ET-302	Islamic Studies/Ethics	2(2-0)	IS/ET-302	Nil
			Total Credit Hours	17(16-10)		
Sem No.	Sr. No.	Course Code	Course Title	Credit Hours	Knowledge Area	Pre-requisite Courses
4	1	HND-404	Metabolism of Nutrients	2(2-0)	HND-404	Nil
	2	HND-406	Diet Modelling and Counselling	3(2-2)	HND-406	Nil
	3	HND-408	Nutrition Epidemiology and Public Health	3(3-0)	HND-408	Nil
	4	HND-410	Food Microbiology	3(2-2)	HND-410	Nil
	5	HND-412	Assessment of Nutritional Status	3(2-2)	HND-412	Nil
	6	HND-404	Metabolism of Nutrients	2(2-0)	HND-404	Nil
	7	CS-402	Introduction to Computing	3(2-2)	CS-402	Nil
			Total Credit Hours	19 (15-8)		

2.5 Course Contents

Course contents are defined in teaching / lesson plans. Lesson plans contain detailed course contents, CLOs, teaching and assessment methods and other necessary details. Lesson plans of HND-301 Fundamentals of Human Nutrition, HND-403 Micro and Macronutrients in Human Nutrition, HND-407 Food Analysis and Sensory Evaluation and HND-412 Assessment of Nutritional Status are provided as samples in Annexure D.

2.6 Consistency of Program Delivery and Assessment Methods and their Support in PLO Attainment

The academic calendar is prepared by the Academics Branch AAUR at the start of the semester and is forwarded to all concerned affiliations. Concerned faculty prepares the teaching/lesson plans, which are forwarded to the Academics Branch and are uploaded on the Learning Management System (LMS)

before the start of the semester. A course folder is maintained during the semester for each course. Updating the course folder is the responsibility of the concerned faculty member

2.6.1 Teaching Methods

Teaching methods are made an integral part of the teaching/lesson plan. Faculty members select an appropriate teaching method according to the learning level and desired outcomes. The teaching methods include presentations, lectures, videos, assignments, term projects. Sample lesson plans are attached as Annexure 'D'. To access the effectiveness of the teaching method, QED conduct the number of surveys to access the quality of education. The sample survey is attached in Annexure E.

2.6.2 Assessment Methods

In theory paper, students' evaluation is done by mid-term examination, assignments/ quizzes and final examination. Both the mid-term and final examinations are compulsory. A student who misses the mid-term examination is not allowed a make-up examination and is awarded zero marks in that examination. In case a student does not appear in the final examination of a course, he/she will be deemed to have failed in that course. In theory, weightage to each component of the examination is as prescribed hereunder:

Table 18: Examination Weight

Credit Hours	Quiz-Assignment	Mid-Examination	Final Examination	Practical
3(3-0)	20%	30%	50%	N/A
3(2-2)	13.33%	20%	33.33%	33.33%
2(2-0)	20%	30%	50%	N/A

The student must pass the practical final examination separately. A student is eligible to sit for the examination provided that he/she has attended not less than 75% of the classes in theory and practical, separately. The minimum passing marks for each course are 40% for undergraduates.

CRITERION 3 LABORATORIES AND COMPUTING FACILITIES

Criterion 3 Laboratories and Facilities

Standard 3-1: Laboratory manuals/documentation/instructions for experiments must be available and daily accessible to faculty and students.

3.1 Labs

The details of the Science Labs including staff, related course work, type of work stations, are provided in Table 20.

- Number of total core/elective/Supporting Courses = 24
- Number of Lab courses = 10
- Number of laboratories = 3

Standard 3-2: There must be support personal for instruction and maintaining the laboratories.

Table 19: Full Time Lab Engineers

Name	Designation	Highest Degree	Date of Joining-Resigning	Type of Job
Usman Ali Raza	Lab Attendant	---	2024	Permanent
Usman Ali Raza	Lab Attendant	---	2022-2023	Permanent

Standard 3-3: The university computing infrastructure and facilities must be adequate to support the program's objectives.

Table 20: Computing Labs Details

Sr. No.	Name of Laboratory (Staff Names--Qualifications)	Lab(s) of Course(s) Conducted in the Lab.	Type(s) of Workstations (No. of each type)	Nature of Experiments	No. of Students per Workstation
---------	--	---	--	-----------------------	---------------------------------

1	HND-Lab (Usman Ali Raza)	HND-302 Human Anatomy HND-304 Human Physiology-I HND-405 Meal planning and management HND-401 Human physiology-II HND-406 Assessment of nutritional status BCH-302 Introductory biochemistry HND-402 General pathology FST-302 Food Biotechnology	No of working stations 10 with all required equipment, instruments and chemicals	Hands on / Demonstration	1:4
2	Science LAB Technician and attendant (Usman Ali Raza)	HND-303 Food processing and preservation	Number of 10 Multimedia-0 White Board-1 Internet Access	Hands on / Demonstration	1:4
3	Computer lab A (Usman Ali Raza) Technician	CS-402 Introduction to information and communication technologies Students work services	Number of computers 50 Multimedia 1 Whiteboard 1 Internet access	Demonstrations , lectures, students work, assignments	1:1

CRITERION 4 STUDENTS SUPPORT AND ADVISING

Criterion 4 Students Support and Advising

University administration has formulated centralized support and advising statutes. These statutes provide information regarding admission, scholarships, financial matters etc. AIS arranges orientation to the newly admitted student in its capacity that is in addition to the central orientation session held for all students of the university. AIS arranges curricular and extracurricular activities/events such as sports week, technical workshops and annual dinner.

Standard 4-1: Courses must be offered with sufficient frequency and number for students to complete the program in a timely manner.

Courses are taught as per HEC criteria.

- At the undergraduate level subjects/courses are offered as per the scheme of study provided by the HEC and approved by the Academic Council.
- Elective courses are offered as per the policy of HEC and the University.
- No course is offered consecutively in any two semesters.

Standard 4-2: Courses in the major area of study must be structured to ensure effective interaction between students, faculty teaching assistants.

Contents of all major courses at BS (HND) contain an application development part. This part is assigned in the early weeks of the course. Students keep close interaction throughout the course with course instructor to accomplish the development of the said application. Assignments also increase interaction between student and teacher. The teaching methodology followed for BS (HND) is both instructional and constructive, where students are taught and concepts and also guided to explore additional concepts of the course domain. This exploration binds students with the teacher for assistance and progression. Meetings of the Institutional Board of Studies design and improves the BS (HND) courses. Course instructors of any major course normally invites other sibling faculty members for evaluation of student's presentation or software applications at the end of the course. This provides interaction of students to other faculty members as well. Institute always encourages the interaction between each section of BS (HND) classes through software competitions held during student's week.

Standard 4-3: Guidance on how to complete the program must be available to all students and access to qualified advising must be available to make course decisions and career choices.

Several steps have been taken to guide students by different ways such as:

- Students are informed about the program requirement through the director's office.
- Through the personal communication of the teachers with the students.
- Meetings are organized by the director of the Institute for counselling of the students. Besides, students can also contact with the relevant teachers whenever they face any problem.
- Students can meet the director of the institute whenever they feel the need to meet on any serious issue.
- Realizing the need for exploring job opportunities for university graduates.

4.1 Mechanism for Providing Guidance to Students on Academic, Career and Aspects Pertaining to Wellness

4.1.1 Academic Counselling

Program coordinator and concerned faculty members help the students in decision of course enrolment and about their career path.

Table 21: Student Teacher Ratio

2022-2023	2023-2024
1:20	1:25

4.2 Students Workload, Class Sizes for Theory as well as Laboratory Sessions and Completion of Courses

4.2.1 Class Size

There are 20 to 30 students on average in each batch. During lab work each, students have a separate station to perform tasks effectively.

4.2.2 Semester Academic Load

Academic load in a semester is in the range of 17-19 credit hours except final semester where 10 credit hours are taught. This has been done intentionally to provide students with maximum free time, as they have to move in the market for completion of their final year internships. Students also have to appear for the interviews conducted by the employers.

4.2.3 Completion of Course and Student Feedback

Course files are prepared for each course and are available with the academic department. Instructors are required to submit a course teaching / lesson plan. Coordinator ensures completion and conduct of the course as per schedule. Student feedback is taken twice every semester on learning management system (LMS). Sample teacher and Course evaluation is provided in Annexure D. Student Activities and Involvement in Activities Providing Experience in Management and Governance, Representation in Education and Social Activities

4.2.4 Participation in Competitions

Students are encouraged to participate in extracurricular activities. Such activities are held within AIS as well as outside AIS. Students are facilitated by providing them transportation. Competitions held / participated in recent past are given in following sections.

4.2.5 Competitions / Events Held

Details of recent completions held are given in Table 23.

Table 22: Recent Events Held in AIS

List of Events-Spring 2023-2024		
Sr. No	Event	Date
1	Food Exhibition	October, 2023
2	Sports Gala 2023	March, 2023
3	Bonfire	December, 2023
4	Bonfire	December, 2024
5	Sports Gala 2024	March, 2024

CRITERION 5: PROCESS CONTROL

Criterion 5 Process Control

Standard 5-1: The process by which students are admitted to the program must be based on quantitative and qualitative criteria and clearly documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

5.1 Requirements and Processes for Admission of Students to the Program, Response and Annual Intake

5.1.1 Admission Criteria

- i A person holding Higher Secondary Certificate, A-level, or an equivalent certificate from any recognized institute with at least second division or overall 50% marks, or any other marks specified shall be eligible to apply for admission.
- ii Admission will be on open merit basis, with the following weightage for merit (Intermediate 50%).

The admission criteria are laid out by the Arid Agriculture University and are part of AIS statutes. Admissions are handled by the Admission Office of AIS for all programs of the AIS.

5.1.2 Academic Standing

- i Grade Point average
 - a) Maximum grade point average 4.00
 - b) Minimum grade point average for obtaining the Degree 2.50
- ii To remain on the role of the university, a student shall be required to maintain the following minimum CGPA in each semester:

Semester	CGPA
1 st Semester	0.75
2 nd Semester	1.00
3 rd Semester	1.25
4 th Semester	1.50
5 th Semester	1.75
6 th Semester	2.00

7 th Semester	2.25
8 th Semester	2.50

- A student who does not meet the above requirement for promotion shall cease to be on the university roll. However, he/she may repeat the whole semester only once.
- The course grades that a student earns in the repeated semester shall replace the previously earned course grades.
- In the 8th semester, if a student fails to achieve the 2.5 CGPA, he/she shall have to repeat the course/courses with the lowest grades, to make CGPA of 2.5 within the maximum time period allowed for the degree.
- Migration from other universities and institutes to university will be entertained as per University migration rules.

Standard 5-2: The process by which students are registered in the program and monitoring of students' progress to ensure timely completion of the program must be documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

5.2 Examination and Weightage

Theory

In theory paper, students' evaluation is done by mid-term examination, assignments/ quizzes and final examination. Both the mid-term and final examinations are compulsory. A student who misses the mid-term examination is not allowed a make-up examination and is awarded zero marks in that examination. In case a student does not appear in the final examination of a course, he/she will be deemed to have failed in that course. In theory, weightage to each component of the examination is as prescribed hereunder:

Table 23: Examination Weights

Credit Hours	Quiz-Assignment	Mid-Examination	Final Examination	Practical
3(3-0)	20%	30%	50%	N/A
3(2-2)	13.33%	20%	33.33%	33.33%
2(2-0)	13.33%	20%	33.33%	N/A

Practical

The student must pass the practical final examination separately.

5.2.1 Eligibility for Examination

A student is eligible to sit for the examination provided that he/she has attended not less than 75% of the classes in theory and practical, separately. The minimum pass marks for each course are 40% for undergraduates.

Standard 5-3: The process of recruiting and retaining highly qualified faculty must be in place and clearly documented. Also processes and procedure for faculty evaluation, promotion must be consistent with institution mission statement.

5.3 Faculty Development, Training and Retention

5.3.1 Faculty Training and Mentoring

Following opportunities and facilities are available for faculty training and mentoring.

- The new faculty attends orientation training and methods of instruction workshop.
- AIS sometimes conducts faculty training to enhance the educational experience.

5.3.2 Faculty Retention and Career Planning

Faculty is one of the most important parts of the institute and hiring and retention of best-in-class faculty is the topmost priority of the institute. For this purpose, the following are being offered.

- AIS offers a competitive pay package.
- Full funding for attending National/ International conferences/ seminars/ Workshops.
- Financial support for carrying out Masters & Doctoral studies.
- Funding through government and non-profit national and international organizations is facilitated.
- Promotions are based on experience and research work.
- The teaching load is based on the guidelines provided by the HEC so faculty can spend most of their time in research.

Standard 5-4: The process and procedures used to ensure that teaching and delivery of course material to the students emphasizes active learning and that course learning outcomes are met. The process must be periodically evaluated to ensure it is meeting objective.

5.4 Strength and Competencies of Academics Staff covering all Areas of the Program

Standard 5-5: The process that ensures that graduates have completed the requirements of the program must be based on standards, effective and clearly documented procedures. This process must be periodically evaluated to ensure that it is meeting its objectives.

AIS has a mix of qualified and experienced faculty members for teaching and research. Most of the faculty member have qualifications from leading universities of the world. The pyramid of academic architecture of AIS is shown in Figure below.

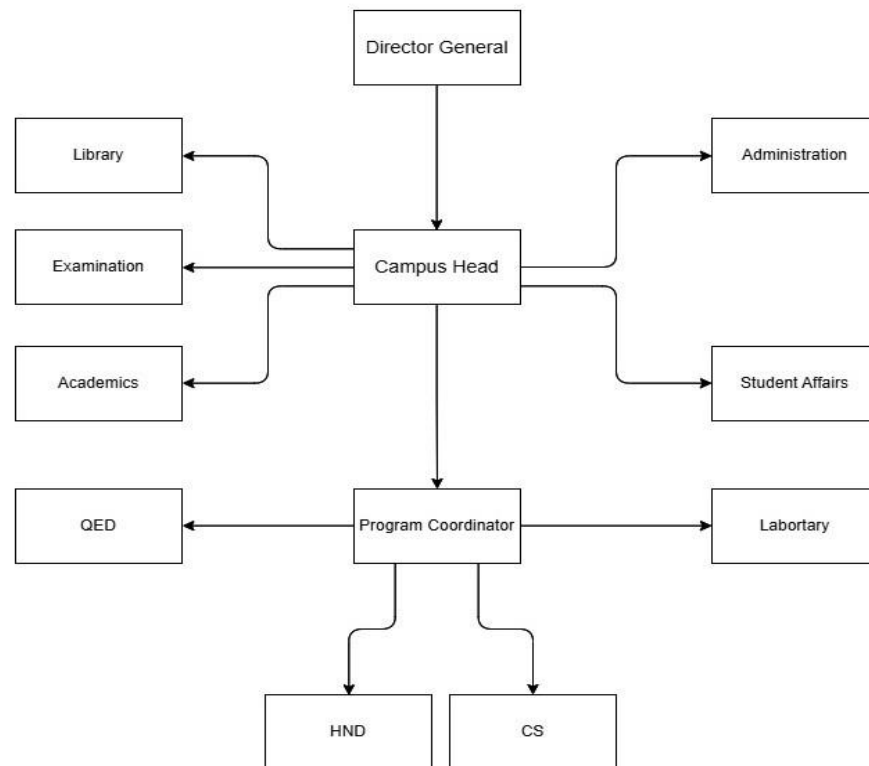


Figure 3: Academic Pyramid

CRITERION 6 FACULTY

Criterion 6 Faculty

Standard 6-1: There must be enough full-time faculty who are committed to the program to provide adequate coverage of the program.

6.1 Faculty

Details of faculty in AIS is given below.

Present Scenario

Full-Time Faculty Size	Number of faculty members with MS	Full Professors	Associate Professors	Assistant Professors	Lecturers	Teaching Assistants/Fellows
	0 14			-	14	

Faculty Profile

Name	Designation	Highest Degree	Subject/Discipline of Highest Degree	Faculty Type (Permanent/Contract)	Year of Joining-Resigning
Dr. Hammad Elahi	Lecturer	Masters	Pharmacy	Visiting	2023
Mr. Mehtab Ahmad	Lecturer	Masters	Human Nutrition and Dietetics	Permanent	2024
Mr. Muhammad Bilal	Lecturer	Masters	Human Nutrition and Dietetics	Permanent	2024
Mr. Hasham Yasir	Lecturer	Masters	Human Nutrition and Dietetics	Visiting	2024
Ms. Saba Mukhtar	Lecturer	Masters	Human Nutrition and Dietetics	Visiting	2024
Ms. Arouj Anwar	Lecturer	Masters	Molecular	Visiting	2024

			Biology		
Ms. Asifa Batool	Lecturer	Masters	Mathematics	Visiting	2024
Ms. Meha Arshad	Lecturer	M.Phil.	Psychology	Visiting	2024
Mr. Muhammad Usama	Lecturer	Masters	Islamic Studies	Visiting	2022

6.2 Faculty Distribution by Program Area

Table 24: Faculty Distribution by Program Area

Program Area of Specialization	Course in Area	Average Number of Section per Year	Number of Faculty Members in Each Area
Nutritional	2	2	1
Non Nutritional	1	3	1
General Education	3	3	2

6.2.1 Full Time Lab Engineers

Table 25: Full Time Lab Engineers

Name	Designation	Highest Degree	Date of Joining-Resigning	Type of Job
Usman Ali Raza	Lab Attendant	---	2023	Permanent
Usman Ali Raza	Lab Attendant	---	2023-2024	Permanent

6.2.2 Faculty Members at AIS and Ratio of Course offering

Table 26: Part Time Faculty Members at AIS

Part-Time Faculty Size	Number of Full Time Faculty Members with		Total Number of Courses Offered by the Institute	Number of Part-Time Faculty Members with		Average Teaching Load Full Time Faculty
	PhD	MS		PhD	MS	
(Fall-2024)		2			10	09-12 Credit hour

(Spring-2024)		2			8	09-12 Credit hour
(Fall-2023)		2			6	09-12 Credit hour
(Spring-2023)		2			4	09-12 Credit hour

Standard 6-2: All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.

6.3 Overall Staff Workload

6.3.1 Faculty Workload

Table 27: Teaching Load

Teaching load Based on 2023	
Lecturer	12-14 Cr. Hr

6.4 Faculty Development, Training and Retention

6.4.1 Faculty Training and Mentoring

Following opportunities and facilities are available for faculty training and mentoring.

- The new faculty attends orientations training and methods of instruction workshop.
- During last two years' faculty training was arranged

6.4.2 Faculty Retention and Career Planning

Faculty is one of the most important part of the AIS and hiring and retention of best-in-class faculty is the top most priority of the school. For this purpose, following are being offered.

- AIS offers a competitive pay package.
- Funding for attending seminars/ workshops available for faculty members.
- Funding through government and non-profit national and international organizations is facilitated.
- Promotions are based on experience and contribution made for academics.
- Teaching load is based on the guidelines provided by the HEC.

6.5 Sufficiency and Competency of Technical and Administrative Staff in Providing Adequate Support to the Educational Program

6.5.1 Sufficiency and Competency of Technical Staff

The lab technicians and lab engineers are well qualified and meet the qualification requirements of their respective jobs.

Standard 6-3: All faculty members should be motivated and have job satisfaction to excel in their profession.

6.5.2 Sufficiency and Competency of Administrative Staff

AIS has adequate number of administrative staff for office and administration jobs. Administrative staff of the department is headed by Admin Manger. The staff is responsible for general upkeep of the AIS building and offices. In case of medical emergency, a number of staff is trained to provide first aid. They are also responsible in case of a fire emergency and have been designated as fire marshals. The administrative staff is also responsible for office work,

6.6 Faculty Survey

To measure the faculty satisfaction and identifying their experience at AIS, QED conducted faculty Survey at end of each semester. Faculty surveys help to identify faculty member level satisfaction and their experience with administrative staff and faculty members. Faculty member suggestions and feedback help to improve the department working. The faculty survey results are available in annexure F.

Standard 6-4: There must be an adequate number of high-quality graduate students, research assistants and Ph.D. students.

AIS is not accredited for masters or PhD Degree. Teaching Assistants positions are not available for AIS.

CRITERION 7: INSTITUTIONAL FACILITIES

Criterion 7 Institutional Facilities

Standard 7-1: The institution must have the infrastructure to support new trends in learning such as e-learning.

7.1 Adequacy of Teaching and Learning Facilities

The adequacy of teaching and learning facilities that include classrooms, learning-support facilities, study areas, information resources, library, computing and information-technology, etc. is described in following sections.

Standard 7-2: The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel.

7.1.1 Lecture Facilities

The AIS building is situated within the premises of University town Phalia road, Mandi Bahauddin. AIS has building on rent. The building has following facilities:

- Classrooms: 9
- Seating capacity of each classroom: 50
- Audio-Video facilities: Computer, multimedia projector, audio system
- Science Laboratories

Following dedicated laboratories are available.

- Computational Lab
- SCIENCE LAB
- HND

The science labs facilities have latest equipment.

7.1.2 Library

The AIS Library has following facilities.

- Institute has its own library which has sufficient number of nutritional sciences related books. New books are regularly bought, but currently library contains low-cost editions. Expensive books are unavailable.
- A good collection of e-books is also available in library.
- Reproduction facility is also available in the form of printers in AIS where nutritional science and other subject books like mathematics are being printed after necessary permission.

7.1.3 Sports

At AIS the implementation of a wholesome policy helps shape student's personalities and careers in a more efficient manner. Students are, therefore, encouraged to participate in various sports competitions held as a regular feature of the campus life. The following facilities are available in AIS main campus.

• Badminton Court	1
• Cricket Ground	1
• Tug of War	1

7.1.4 Transport

AIS maintains an organized transportation network within the campus for the students and staff. Vans provide transport from 8:30 to 9:30 am. AIS provide transportation within Mandi Bahauddin city and outskirts. Transportation facilities provided to students of Phalia, Malakwal, and Mano Chak.

CRITERION 8 INSTITUTIONAL SUPPORT

Criterion 8 Institutional Support

8.1 Institutional Financial Commitment and Support

Standard 8-1: There must be sufficient support and financial resources to attract and retain high quality faculty and provide the means for them to maintain competence as teachers and scholars.

8.1.1 Income and Expenditure Details

Table 28: Income and Expenditure Details

S No	Source of Income	Financial Year 2023-24 (July 2023 to August 2024)			Financial Year 2022-23 (July 2022 to August 2023)		
		Budget	Income	Expenditure	Budget	Income	Expenditure
1		16500000	15944538	15844538	16000000	15797607	15697607

Standard 8-2: There must be an adequate number of high-quality graduate students, research assistants and Ph.D. Students.

8.1.2 Student Teacher Ratio

2023-2024	2022-2023
1:11	1:12

Standard 8-3: Financial resources must be provided to acquire and maintain library holdings, laboratories and computing facilities.

Yearly budget for the past two years	2022-2023	2023-2024
	16000000	16500000
Institution's yearly budget for research and faculty development for the past five years	300000	-
Institution's yearly budget for library	300000	350000
Institution's yearly budget for computing facilities	500000	550000
Yearly budget of the department/ school/ college that offers the program	2022-2023	2023-2024
	-	-
Department/school/ college's yearly budget for research and faculty development for the past two years	-	-
Fee Structure	Subsidized Fee: Rs.28000	Subsidized Fee: Rs.28000
	Regular Fee: Rs.40000	Regular Fee: Rs.42000
What are sources of income	Semester/Tuition Fee	Semester/Tuition Fee
Other information (if any)		

Summary

The HND program at AAUR and affiliated institutes was developed in line with the Higher Education Commission (HEC) requirements. Extensive collaboration among stakeholders ensured the creation of a unified curriculum. The curriculum is continually reviewed, considering HEC revisions and feedback from stakeholders. Students can choose from elective courses to enhance their knowledge.

Faculty members are responsible for creating lesson plans based on approved course content, with the flexibility to make minor adjustments. Feedback from faculty and students is regularly collected through the Learning Management System (LMS), and the QED, Academic Directors, and HODs monitor the process.

The curriculum's assessment methods include quizzes, assignments, presentations, and exams, with each course learning outcome linked to specific questions. Feedback from various sources is addressed during faculty meetings, fostering continuous improvement. The program's focus on learning outcomes ensures students acquire relevant skills and knowledge.

CONTINUOUS QUALITY IMPROVEMENT

Continuous Quality Improvement

Program Planning

Curriculum Development

The curriculum of the Program BS(HND) was developed to meet the requirements of HEC. A comprehensive exercise was carried out among all the stakeholders to unify the curriculum. During that phase, experts from all the AAUR departments and affiliated institute were brought together and careful deliberations were carried out. The finalized unified curriculum is implemented and taught in AAUR and Affiliated institutes. A number of elective courses are available for students to choose to increase their depth and breadth of knowledge.

Curriculum Review

A comprehensive policy exists at AAUR and AIS level for curriculum review and updating. The curriculum could be reviewed on the basis of a number of factors including HEC revision of curriculum requirements, feedback from stakeholders, etc.

Content Review

Courses are assigned to the faculty at the start of the semester. The content of each course has been defined by the department and a lesson / teaching plan is prepared by the concerned faculty based on the approved course contents. The faculty member is allowed to change 10% of the course content of a course. Sample lesson plans are provided at Annexure 'D'. The lesson plans include detailed content breakdown, teaching methods and assessment methods.

Response to Feedback

Feedback from faculty and students is collected on regular basis through the LMS system. Students are required to provide feedback once during the course. The anonymous feedback becomes available to the concerned faculty for review and any necessary action. Faculty also provides feedback at the end of the course. The feedback provided by faculty and students is monitored by the QED, Academic Directors, coordinators,

Various type of feedbacks obtained from alumni, faculty, students, employers, etc. are addressed at various levels during the faculty meetings.

Tracking of Contribution of Individual Courses to PLOs

The course learning outcomes for each course has been defined and linked with appropriated Program learning outcomes. The assessment methods of CLOs are part of the lesson plans where a specific CLO may be evaluated using any suitable assessment method. The assessment methods include quizzes, assignments, presentations, reports, term projects, end semester exams, etc. Specific CLO is attributed to a specific question. The question papers are approved by the main campus PMAS-AAUR for appropriate level of learning and difficulty. The complete record of CLO attainment is maintained in the Academics Branch.

Annexure A: Lesson Plan

Lesson Plan:

COURSE READINESS						
Subject Title:	Micro & Macronutrients in Human Nutrition			Course code		HND-403 3(3-0)
Semester	Second (3 rd)			Department		Human Nutrition and Dietetics
Course Introduction	To get the expertise in planning eating plan and guidelines for a person it is necessary for students to understand the types, classification and complete physiological and biochemical metabolism of all micro and macro nutrients in human body.					
Learning Objective	<ul style="list-style-type: none">• A deep detail demonstrations on absorption, digestion, metabolism and excretion of nutrients in the human body• Interaction between different nutrients and their effect on each other and body mechanism.• Knowledge about the health disorders due to consumption of non-optimal quantities of the nutrients.• Clinical manifestations, signs and symptoms of different nutrients deficiencies.					
Recommended Textbook	<ul style="list-style-type: none">• Understand Nutrition by Whitney Rolfes 11th Edition.• Advance nutrition and human metabolism by sareen Gropper.<ul style="list-style-type: none">• Metabolism at a glance by JG, Blackwell					
Grading System (Weighted Percentages)	Assignments	5%	Projects	----	Midterm Exam	20%
	Quizzes	10%	Presentations	5%	Final Term Exam	60%
Other Rules						
Logistics	Class Time			Consulting Hours		
	Venue			Contact Information	dietitianbilal200@gmail.com 0302-6718779	

Lesson Plan				
WEEK-1				
Lecture	TOPICS	Content delivered	Reference source	Assignments/Quiz/Class Activity)
1-	Introduction vitamins Water soluble vitamins Vitamin C	- introduction to types and classification of vitamins Water soluble and fat soluble vitamins What is difference between both classes their basic composition and essential structures to understand and common properties of vitamins. Vitamin c, history, nomenclature, sources, requirements, Digestion & absorption, t transport, metabolism, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	Advance Human Nutrition and Metabolism by sareen S Gropper Understanding nutrition + slides by instructor	
2	Vitamin B12(cyanocobalamine)	History, discovery, nomenclature, essential structure, requirements,	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. 	Quiz #1

		Digestion & absorption, transport, metabolism, excretion, functions, clinical manifestations, hypo& hyper vitaminosis	<ul style="list-style-type: none"> Advance nutrition and human metabolism by sareen Gropper. 	
LESSON PLAN WEEK -2				
Lecture	TOPICS		Reference source	Comments
3	Vitamin B9 (folic acid, folate)	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	
4	Thiamin B1	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake,	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	Quiz#2

		Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.		
--	--	--	--	--

Lesson Plan
WEEK- 3

Lecture	TOPICS	Content delivered	Reference source	Comments
5	Riboflavin B2	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	
6	Vitamin B3(niacin)	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo&	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	Assignment 1

		hyper vitaminosis.		
<p style="text-align: center;">LESSON PLAN</p> <p style="text-align: center;">WEEK- 4</p>				
Lecture	TOPICS	Content delivered	Reference source	Comments
7	Vitamin B6(pyridoxine)	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	
8	Vitamin B7(Biotin)	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	Quiz 3

Lesson plan				
WEEK-5				
Lecture	TOPICS	Content delivered	Reference source	Comments
9	Vitamin B5(Pantothenic acid)	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	
10	Vitamin B1(thiamine)	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	
LESSON PLAN				
WEEK – 6				

Lecture	TOPICS	Content delivered	Reference source	Comments
11	Fat soluble vitamins Vitamin A	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	Assignment 2
12	Vitamin A	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	presentation
<p style="text-align: center;">LESSON PLAN</p> <p style="text-align: center;">WEEK-7</p>				
Lecture	TOPICS	Content delivered	Reference source	Comments
13	Vitamin D	History, discovery,	<ul style="list-style-type: none"> Understand Nutrition by 	

		nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	
14	Vitamin D	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	<ul style="list-style-type: none"> • Understand Nutrition by Whitney Rolfes 11th Edition. • Advance nutrition and human metabolism by sareen Gropper. • 	Quiz 4
Lecture	TOPICS	Content delivered	Reference source	Comments
15		MID Term exam week WEEK -8		

16	Vitamin k	History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo & hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	
LESSON PLAN WEEK-9				
Lecture	TOPICS	Content delivered	Reference source	Comments
17		History, discovery, nomenclature, essential structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo & hyper vitaminosis.	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	
18	Vitamin E	History, discovery, nomenclature, essential	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. 	

		structure, requirements, RDA, UL, sources, Digestion & absorption, transport, metabolism, uptake, Storage, excretion, functions, clinical manifestations, hypo& hyper vitaminosis.	Advance nutrition and human metabolism by sareen Gropper.	
<p style="text-align: center;">LESSON PLAN</p> <p style="text-align: center;">WEEK-10</p>				
Lecture	TOPICS	Content delivered	Reference source	Comments
19	Carbohydrates	Types, requirements, sources, Glucose metabolism to provide energy Glycogen metabolism 1&2	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	
20		Glycogenolysis glycogenesis	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	Quiz 5
<p style="text-align: center;">LESSON PLAN</p> <p style="text-align: center;">WEEK-11</p>				

Lecture	TOPICS	Content delivered	Reference source	Comments
21		Pentose phosphate pathway, glycolysis in skeletal muscles	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	
22	Clinical manifestations,	Carbs related health disorders and their solutions ,recomendations	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	Assignment 3
LESSON PLAN WEEK- 12				
Lecture	TOPICS	Content delivered	Reference source	Comments
23	Fat metabolism	Pyruvate metabolism, Metabolism of glucose to fat Glycolysis and pentose phosphate pathway to collaborate with liver fat	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	Quiz 4
24	Clinical manifestations	Fat related health issues ,solutions, recommendations	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper.	
LESSON PLAN WEEK – 13				
Lecture	TOPICS	Content delivered	Reference source	Comments

25	Proteins	Biosynthesis of non-essential amino acids Catabolism of amino acid 1	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	Quiz 6
26		Catabolism of amino acid 2 Metabolism of amino acids in glucose starvation and refeeding syndrome	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	
LESSON PLAN WEEK-14				
Lecture	TOPICS	Content delivered	Reference source	Comments
27		Disorder of amino acids metabolism Phenylalanine and tyrosine metabolism	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	
28	proteins	Ornithine urea cycle	<ul style="list-style-type: none"> 	
LESSON PLAN WEEK -15				
	TOPICS	Content delivered	Reference source	Comments
29	Diabetes	Metabolic pathway in fasting liver, their disorders and Reye's syndrome	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. Advance nutrition and human metabolism by sareen Gropper. 	Assignment 4

Lecture	TOPICS	Content delivered	Reference source	Comments
31	Revision	Presentation & discussion	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. <p>Advance nutrition and human metabolism by sareen Gropper.</p>	Quiz 5
32	Revision	Presentation & discussion	<ul style="list-style-type: none"> Understand Nutrition by Whitney Rolfes 11th Edition. <p>Advance nutrition and human metabolism by sareen Gropper.</p>	Quiz 6
30	<p style="text-align: center;">LESSON PLAN</p> <p style="text-align: center;">WEEK-16</p>			

<i>COURSE READINESS (ARSHI)</i>			
Subject Title:	Food Analysis & Sensory Evaluation	Course code	HND- 407 3(2-2)
Semester	Third (3 rd)	Department	Human Nutrition and Dietetics
Course Introduction	<p>Food analysis and sensory evaluation course is practical approach to enable students to determine the composition and physical features of foods and food related products .to identify the nutrient contents, amount, standardization for food profiling and food labeling procedures .Detection of food adulterants .toxins ,preservatives added during processing .food safety evaluation .</p>		
Learning Objective	<ul style="list-style-type: none"> Understand the role laboratory research techniques in food and nutrition. To familiarize with different laboratory equipment's, operation and techniques, process related to food analysis and physical features assessment to ensure freshness and quality To learn food composition, profiling, innovations in novel foods & nutrients extractions. Knowledge about Rules ,regulations ,food laws specified by governing bodies in food processing industry 		

	<ul style="list-style-type: none"> Preparation and standardization of lab solutions and chemicals 					
Recommended Textbook	<ul style="list-style-type: none"> Awan, J.A. and Rehman, S. U. 2011. Food analysis manual, Unitech Communications, Faisalabad-Pakistan. AOAC,2016.Official methods of Analysis of AOAC, international,20thED,Association of official Analytical Chemists ,Arlington ,USA Cruz,R.M.S,M.Vierira,2014 ,Methods in food Analysis CRC publishers 					
Grading System (Weighted Percentages)	Assignments	5%	Projects	---	Midterm Exam	25%
	Quizzes	10%	Presentations	NIL	Final Term Exam	Theory = 60% Practical = 50%
Other Rules						
Logistics	Class Time			Consulting Hours		
	Venue			Contact Information	03324880890	

Lesson Plan

WEEK-1

Lecture	TOPICS	Content delivered	Reference source	Assignments/Quiz/Class Activity)
1	Introduction	<ul style="list-style-type: none"> Introduction to subject Purpose of food analysis, significance of physiochemical properties of foods. Sample techniques, preparatory operations and preservation techniques Types of sensory properties 	<ul style="list-style-type: none"> Awan, J.A. 2011.Food processing and Preservation. Awan, J.A. and Rehman, S. 	

		of foods	U. 2011. Food Processing manual,	
2	Textural and Rheological properties of fruits and vegetables	<ul style="list-style-type: none"> • Concept of stress and strain • Rheology (shear stress ,shear strain,rate,viscosity,apparatus viscosity • Texture of solids 	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. <p>Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,</p>	Quiz 1
LAB #1	Laboratory Use	Lab equipment's: Names, characteristic features specification, purpose of use & operational details demonstration .		

WEEK – 2

Lecture	TOPICS		Reference source	Comments
3	Texture and rheology of solids	Shear-strain relationship, compression test of foods, cutting, shearing, bending, puncture, penetrate Texture profile analysis)TPA	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. • Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	Practical log book preparation

4	Rheology of fruits and vegetables	Physical appearance, fruit juices, jams, puree, paste, pulps, rheology and texture properties, product quality	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation • Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	
LAB#2	Food analysis sample preparations	Practicing the initial food processing preparatory phases Different foods' groups sampling <ul style="list-style-type: none"> • Removal of moisture from food samples • Physical properties identification 	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. • Awan, J.A, Food Processing manual. 	Quiz 2

WEEK – 3

Lecture	TOPICS	Content delivered	Reference source	Comments
5	Pigments & color of muscle foods	Introduction Myoglobin chemistry Metmyoglobin reduction	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. • Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	Assignment#1 Enlist the excessively consumed processed foods.
6	Measure of pigments and meat color	Reflectance measurement Visual evaluation Computer vision analysis Composition analysis	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. • Awan, J.A. and Rehman, S. U. 2011. Food Processing 	

			manual,	
LAB#3	Methodologies to analyze fat in foods	<ul style="list-style-type: none"> • Analysis methods of fat • Lipids in fruits and vegetables 	Notes , presentations	

WEEK – 4

Lecture	TOPICS	Content delivered	Reference source	Comments
7	Methods of fat extraction	Methods of vegetable oil extractions Gas chromatography	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. • Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	Assignment# 2 Enlist the micro-organisms and their importance related to foods.
8	Chromatography	Thin layer chromatography HPLC Mass spectrometric based method of vegetable oil analysis	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	
LAB#4		NMR Capillary Electrophoresis	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food 	

			processing and Preservation.	
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WEEK – 5

Lecture	TOPICS	Content delivered	Reference source	Comments
9	Texture in meat and fish products	Texture and sensory evaluation methods and properties profiling	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. • Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	
10	Pigments in fruits and vegetables	Pigments extractions in fruits and vegetables	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. <p>Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,</p>	
LAB#5	Complete food nutrient estimation	Moisture,ash, fat analysis	Notes, presentation.	Quiz 3

WEEK – 6

Lecture	TOPICS	Content delivered	Reference source	Comments
11	Lipids in sea food	Lipid extraction methods in sea foods	<ul style="list-style-type: none"> ○ Awan, J.A. 2011.Food processing and 	

			Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	
12	Spectrophotometry	Atomic emission, atomic absorption	<ul style="list-style-type: none"> Awan, J.A. 2011.Food processing and Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	
LAB#6	Determination of specific gravity ,PH determination	-How and why to determine specific gravity of different foods? -Demonstration to equipment, hydrometer, gravity bottle, scale measurements -Determination of SG of liquids, soluble solids ,solutions of various conc.	Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	Quiz 4

WEEK – 7

Lecture	TOPICS	Content delivered	Reference source	Comments
13	Dehydration	Different dehydration	<ul style="list-style-type: none"> Awan, J.A. 2011.Food processing 	

		methods ,related dehydration equipment usage, benefits, drawbacks, precautions	and Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	
14	Types of Dehydrators	<ul style="list-style-type: none"> • Hot air driers/oven • Natural draft driers • Freeze driers • Forced draft, Blast freezer drier • spray drier 	<ul style="list-style-type: none"> • Awan, J.A. 2011.Food processing and Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	
LAB#7	Vitamin c	Estimation of vitamin c in different foods	Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	Quiz 5

WEEK – 8

Lecture	TOPICS	Content delivered	Reference source	Comments
15		MID TERM .EXAM		
16	Lab solutions and characterization	Lab solutions preparation and standrization		

WEEK – 9

Lecture	TOPICS	Content delivered	Reference source	Comments
17	Protein estimation	Sample preparation and protein estimation in different foods	<ul style="list-style-type: none"> Awan, J.A. 2011. Food processing and Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	
18	Carbohydrates determination	Carbohydrates determination in foods and their glycemic index	<ul style="list-style-type: none"> Awan, J.A. 2011. Food processing and Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	
LAB#8	Fibers determination	Fiber content determination in foods	Notes, presentation.	Laboratory log book evaluation

WEEK – 10

Lecture	TOPICS	Content delivered	Reference source	Comments
19	NFE	<ul style="list-style-type: none"> NFE analysis and completing the profile of samples 	<ul style="list-style-type: none"> Awan, J.A. 2011. Food processing and Preservation. 	

			<ul style="list-style-type: none"> Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	
20	Minerals estimation by spectrophotometer	<ul style="list-style-type: none"> Estimation of minerals by atomic absorption of UV & flame photometer 	Awan, J.A. 2011. Food processing and Preservation. <ul style="list-style-type: none"> Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	Assignment# 3 How food additives are harmful for our health?
LAB#9	Food samples profiling	Ash protein ,fiber analysis	<ul style="list-style-type: none"> Notes ,PPTs 	

WEEK – 11

Lecture	TOPICS	Content delivered	Reference source	Comments
21	Identification of toxins	<ul style="list-style-type: none"> Identification of toxins in foods and processed products 	<ul style="list-style-type: none"> Awan, J.A. 2011. Food processing and Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	
22	Food adulteration tests	Different foods adulteration tests milk	<ul style="list-style-type: none"> Awan, J.A. 2011. Food processing and 	Assignment# 4 Enlist the types

		analysis from different sources	Preservation. <ul style="list-style-type: none"> • Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	of fermented products available in market?
LAB#10	Chromatography	<ul style="list-style-type: none"> • Paper and thin layer chromatography 	Notes, presentation	

WEEK – 12

Lecture	TOPICS	Content delivered	Reference source	Comments
23	Sensory evaluation of food products	Sensory evaluation of different package vs fresh food products	<ul style="list-style-type: none"> • Awan, J.A. 2011. Food processing and Preservation. 	
24	Foods nutrient composition profile Writing	How to write food nutrient profile Composition Role of profile in food labeling	<ul style="list-style-type: none"> • Awan, J.A. 2011. Food processing and Preservation. Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	Class activity Check the food analysis procedure and make a report on results
LAB#11	Titration methods to estimate minerals	Mineral detection and quantification by titration method	Awan, J.A. and Rehman, S. U. 2011. Food Processing manual,	

WEEK – 13

Lecture	TOPICS	Content delivered	Reference source	Comments
25	Product evaluation	Food products consumer demands and acceptance	<ul style="list-style-type: none"> • Awan, J.A. 2011. Food processing and Preservation. • Awan, J.A. and Rehman, S. U. 2011. Food Processing manual, 	Assignment #4 Make report on sensory and qualitative analysis of preserved foods experiment of laboratory
26	Denaturation of products	Foods shelf life and denaturation causes and solutions	<ul style="list-style-type: none"> • Awan, J.A. 2011. Food processing and Preservation 	
LAB#12	Proximate analysis of foods on bases of solvent extracts	Food proximate analysis by using specific solvents	Notes, presentation.	

WEEK – 14

Lecture	TOPICS	Content delivered	Reference source	Comments
27	Specific gravity of foods	What is gravity of foods Why necessary Determination of specific gravity by	Recommended books/others	

		hydrometer method		
28	Comparative analysis of different foods of same group	<ul style="list-style-type: none"> Comparison between different foods of same group and nature 	Recommended books/others	
LAB#13	Practical practice of analysis	<ul style="list-style-type: none"> Practice of different analytical techniques of food analysis 	Notes, presentation.	

WEEK – 15

Lecture	TOPICS	Content delivered	Reference source	Comments
29	Protein determination in different food groups	<ul style="list-style-type: none"> Qualitative analysis of proteins extracted from different foods 	Recommended books/others	Class activity Monitor the preservation practical performed and make a report
30	Nitrogen combustion	<ul style="list-style-type: none"> Nitrogen combustion analysis inn protein foods 	Recommended books/others	
LAB#14		<ul style="list-style-type: none"> 	Notes, presentation.	

WEEK – 16

Lecture	TOPICS	Content delivered	Reference source	Comments
31		-	Recommended books/others	
LAB#15			Notes, presentation.	
32		Final term exam		

Lesson plan: Fundamentals of Human Nutrition HND-301

COURSE READINESS (SABA)						
Subject Title:	Fundamentals of Human Nutrition		Course code		HND-301 3(3-0)	
Semester	First (1 st)		Department		Human Nutrition and Dietetics	
Course Introduction	The subject is an excellent source to understand the mechanisms, metabolic pathways and major energy nutrients to get expertise about the problems which are majorly caused by dysfunctions in different body organs, receptors and glands. The course will help the students to get grip on pathophysiological conditions i-e metabolic syndromes.					
Learning Objective	<ul style="list-style-type: none">To familiarize with mechanisms and pathways of macronutrients to produce fuel to the body.A detail digestion & absorption of fats, carbohydrates, and proteins in body and role of different receptors involved.Understanding the causes and relation of carbohydrates and fats in development of metabolic syndromes.					
Recommended Textbook	Advance Human Nutrition and Metabolism by sareen. S Gropper					
Grading System (Weighted Percentages)	Assignments	5%	Projects		Midterm Exam	30%
	Quizzes	5%	Presentations	10%	Final Term Exam	50%
Other Rules	Total marks will be liquidified by 50 %					
Logistics	Class Time			Consulting Hours		

	Venue		Contact Information	0318-7781168
Lesson Plan				
WEEK-1				
Lecture	TOPICS	Content delivered	Reference source	Assignments/Quiz/Class Activity)
1	Introduction To The Study Of Nutrition.	-Definition of terminologies:	<ul style="list-style-type: none"> • Advance Human Nutrition and Metabolism by Sareen S. Gropper • Notes, Presentations, PPTs provided by concerned teacher. 	
2	Global food scenario & Food choices, Nutrition information	.	<ul style="list-style-type: none"> • Advance Human Nutrition and Metabolism by Sareen S.G • Notes, Presentations, PPTs provided by concerned teacher . 	

WEEK – 2

Lecture	TOPICS		Reference source	Comments
3	Foundations of healthy diet	Tools of a Healthy Diet: DRIs, DVs, EAR, RDA, UL, AI Nutrition Compositions of	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. 	

	+ meal planning	foods, Nutritional labeling Principles and Guidelines -Diet planning guides -My Pyramid, My Plate, Exchange list. Food screening, energy density and nutrient density of foods, serving sizes ,energy estimations.	<ul style="list-style-type: none"> Notes, Presentations, PPTs provided by concerned teacher. 	
4	Overview of Digestion, absorption, metabolism and excretion mechanism of nutrients.	Understanding of biochemical process and steps in human body(ingestion, digestion, metabolism, absorption and excretion).introductio n GIT, liver, pancreas, gall bladder secretions, hormones, cells, brain mediators related to nutrient processing in body	<ul style="list-style-type: none"> Awan,J.A.2011 Elements of food and nutrition by Understanding Nutrition by Whitney Rolfes 11th edition. Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. Pathophysiology of Human Nutrition Notes, Presentations, PPTs provided by concerned teacher. 	Explore different food styles around the globe, which diet is the best balanced and why?

				<p>What foods and rules can be adopted by population of Pakistan?</p> <p>Make a chart of my pyramid and my plate</p>
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WEEK – 3

Lecture	TOPICS	Content delivered	Reference source	Comments
5	Water	Important role, composition, ratio, types,	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. 	Observe your daily intake of

		<p>ingestion, digestion, absorption, excretion in human body .daily requirement.</p>	<ul style="list-style-type: none"> Notes, Presentations, PPTs provided by concerned teacher . 	<p>water and calculate your requirement t & try to complete target next day.</p>
6		<p>Water as electrolyte ,its types, role in body .acid base balance in different parts of body and their role in body nourishment Water associated health problems</p>	<ul style="list-style-type: none"> Awan,J.A.2011 Elements of food and nutrition by Understanding Nutrition by Whitney Rolfes 11th edition. Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. Notes, Presentations, PPTs provided by concerned teacher . 	

WEEK – 4

Lecture	TOPICS	Content delivered	Reference source	Comments
7	Carbohydrates	<p>Introduction to carbohydrates , types, nomenclature, structure, classification</p> <p>Metabolism of carbs and their byproducts</p> <p>Sugars in foods , types, composition, requirements, role.</p> <p>Glycemic index ,glycemic load</p>	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher . 	<p>Enlist the foods according to their glycemic index and glycemic load make an index with values</p>

8		Carbs as fuel source Glycolysis, ATP production mechanism ,rapid energy shunts and pathways in human body Other fuel systems in body.		
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WEEK – 5

Lecture	TOPICS	Content delivered	Reference source	Comments
9	Fibers ,bulk, energy values ,recommendation s of carbs in daily diet	Types ,composition, source, importance and role of fibers and bulk in human health ,DRI,AD,RDAs, energy values	Understanding Nutrition by Whitney Rolfes 11 th edition. <ul style="list-style-type: none"> Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. Notes, Presentations, PPTs provided by concerned teacher . 	
10	Alternative sugars ,sweeteners	Types of sweeteners, use, function, importance, contraindications		

WEEK – 6

Lecture	TOPICS	Content delivered	Reference source	Comments
11	Fats and oils	Introduction to fats their structure, types, metabolism in body, crucial roles in body, myths about fats and oils. Good fats, bad fats. Sources. Fatty acids and	<ul style="list-style-type: none"> • Awan, J.A. 2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji, M.S; K.krishnaswamy & G.N.VBrahman. 2009. Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher . 	Surprise Quiz
12	Fats and metabolism	Fat metabolism, secondary fuel source, fats and oils substitutes. Recommendations of fats in daily life	<ul style="list-style-type: none"> • Awan, J.A. 2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji, M.S; K.krishnaswamy & G.N.VBrahman. 2009. Textbook of Human Nutrition • Kraus' Food and nutrition therapy • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher . 	

WEEK – 7

Lecture	TOPICS	Content delivered	Reference source	Comments
13	Proteins	Introduction to terminologies,	<ul style="list-style-type: none"> • Awan, J.A. 2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji, M.S; K.krishnaswamy & G.N.VBrahman. 2009. Textbook of 	Quiz

		proteins, amino acids, essential, non-essential, hormones, enzymes, conjugate proteins, ligands, classification on basis of structure, nomenclature, body composition, function. Recommendations .	Human Nutrition <ul style="list-style-type: none"> • Kraus' food and nutrition therapy • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher . 	
14				

WEEK – 8

Lecture	TOPICS	Content delivered	Reference source	Comments
15		MID Term exam week		
16				

WEEK – 9

Lecture	TOPICS	Content delivered	Reference source	Comments
17	Protein Metabolism	Phases of protein metabolism in body their functions & quality, sources	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher. 	
18	Class test		Class Revision test	

WEEK – 10

Lecture	TOPICS	Content delivered	Reference source	Comments
19	Vitamins	Classification(fat& water soluble)Types(catalytic , B vitamin family, antioxidants ,cofactors vice versa	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher . 	
20		Vitamins functions ,sources, recommendations,		

WEEK – 11

Lecture	TOPICS	Content delivered	Reference source	Comments
21		Vitamins role in metabolism and biochemical reactions	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher . 	
22	Minerals & their classification	Definition major, minor ,trace ,ultra-trace minerals ,body mineral composition macro minerals (recommendations , metabolism, Functions)	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher . 	Enlist the foods with trace and ultra-trace elements and their functions in body

WEEK – 12

Lecture	TOPICS	Content delivered	Reference source	Comments
23		Micro minerals, trace elements ,& ultra-trace elements body		

		metabolic& physiologic function,		
24	Mineral deficiency related health problems	Minerals deficiency related health problems ,disorders, Recommendation s Food sources	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji,M.S;K.krishnaswamy&G.N.VBrahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher . 	

WEEK – 13

Lecture	Topics	Content Delivered	Reference Source	Comments
25	Nutrient Deficiency Disorder	Macro- Nutrient related health problems Micro nutrient, vitamin deficiency disorders signs symptoms recommended guidelines.		Class group presentation on Vitamins related diseases
26		Vitamins deficiency disorders, signs, symptoms, complications, recommended guidelines sources.	<ul style="list-style-type: none"> • Awan, J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Bamji, M.S;K. Krishnaswamy & G.N.V Brahman.2009.Textbook of Human Nutrition • Human Nutrition, 2nd ed. Churchill Livingstone, London, UK. • Notes, Presentations, PPTs provided by concerned teacher. 	

WEEK – 14

Lecture	TOPICS	Content delivered	Reference source	Comments
27	Revision	Revision to nutrient's interactions, metabolism, absorption, and functions in body		
28	Processed and synthetic foods	Processed foods and synthetic nutrients contents and role in health and diet	<ul style="list-style-type: none"> • Awan,J.A.2011 Elements of food and nutrition by • Understanding Nutrition by Whitney Rolfes 11th edition. • Notes, Presentations, PPTs provided by concerned teacher. 	

WEEK – 15

Lecture	TOPICS	Content delivered	Reference source	Comments
29		Revision to course contents		Class group presentation on different topics
30		Class presentations		

WEEK – 16

Lecture	TOPICS	Content delivered	Reference source	Comments
31		Final term examination		
32				

Annexure B: Work Performance Evaluation

Performa for Teacher's Work Evaluation

Start Date: _____ **End Date:** _____
Instructor's Name: _____ **Course No:** _____
Class/Section: _____ **Name of Subject:** _____

Sr. No.	Percentage of Course Executed	Instructor Feedback	Reason (if not taken)	Cross Observation
1	Number of Assignments taken			
2	Number of Assignments taken			
3	Number of Presentation taken			
4	Number of Assignments marked			
5	Number of Assignments marked			
6	Number of Presentation marked			
7	Percentage of marks uploaded on sessional sheets/portal			
8	Any other activity done in the class			
9	Number of classes/labs taken			
10	Percentage of Content covered/highlighted			

Date: _____

Verified by: _____

Instructor Feedback:

Observer Feedback:

QED Feedback:

Date: _____

Verified by: _____

Survey for Enhancing Quality of Education

Instructor Name		Department	
subjects currently teaching			
1.	Subject in nature	<input type="checkbox"/> Theoretical	<input type="checkbox"/> Practical
Practical application:			
Does this subject meet the needs and expectations of industry?			
2.	Subject in nature	<input type="checkbox"/> Theoretical	<input type="checkbox"/> Practical
Practical application:			
Is this subject meets the need and expectations of industry?			
3.	Subject in nature	<input type="checkbox"/> Theoretical	<input type="checkbox"/> Practical
Practical application:			
Is this subject meets the need and expectations of industry?			
4.	Subject in nature	<input type="checkbox"/> Theoretical	<input type="checkbox"/> Practical
Practical application:			
Is this subject meets the need and expectations of industry?			
How quality graduates can be produced who would meet the expectations of employer in terms of the knowledge, skills, and competencies?			
Do you think, you are delivering updated knowledge?			
What mechanism do you suggest towards achieving learning outcomes of a given study program			
How do you define a good quality teacher			
What strategies do you generally use in class while teaching as how you clarify the concepts that you teach to your students?			

How do you relate disciplinary knowledge to other subject areas?
Is this way working for students to make them clear?
How do you apply theoretical knowledge from discipline to practical situation?
What have you done to keep yourself up to date with developments in your subject area?
Do you plan your teaching in accordance to achieve the desire objectives?
What do you consider to be the key elements of teaching a successful lesson?
How many steps do you follow for planning a lesson? Can you give me an example of a lesson to which you consider good, and you are asked to repeat that lesson then what would you do to make that different?
What is your opinion about the use of modern instructional techniques in teaching relevant to your subject area?
Are these techniques beneficial for students?
Do you know the specific uses of technology in your discipline?
How you find technological resources specific to discipline?
Like is there any subject which you consider incomplete in teaching or learning if you do not use them?
Enlist technological tools use in your subject area
Suggestions..?

Annexure C: Laboratory Manual Sample for Documentation for Student's Provision

Laboratory Manual For Food Analysis and sensory Evaluation HND-306 Department of Human Nutrition & Dietetics

Sr #	Title of practical	Reference	Page no
1	Proximate analysis of food samples	AOAC,2011	
2	Moisture analysis	AOAC,2011	
3	Ash determination	AOAC,2011	
4	Refractive index and Brix analysis	AOAC,2011	
5	Crude protein analysis in food samples by kjeldhal method.	AOAC,2011	
6	Crude fat estimation of food sample by soxhelt method.	AOAC,2011	
7	Crude fiber estimation by fiber tech apparatus	AOAC,2011	
8	Ph determination	AOAC,2011	
9	Detection of proteins and amino acids	AOAC,2011	
10	Fermentation	AOAC,2011	

Protocol: 1 Proximate analysis of food samples

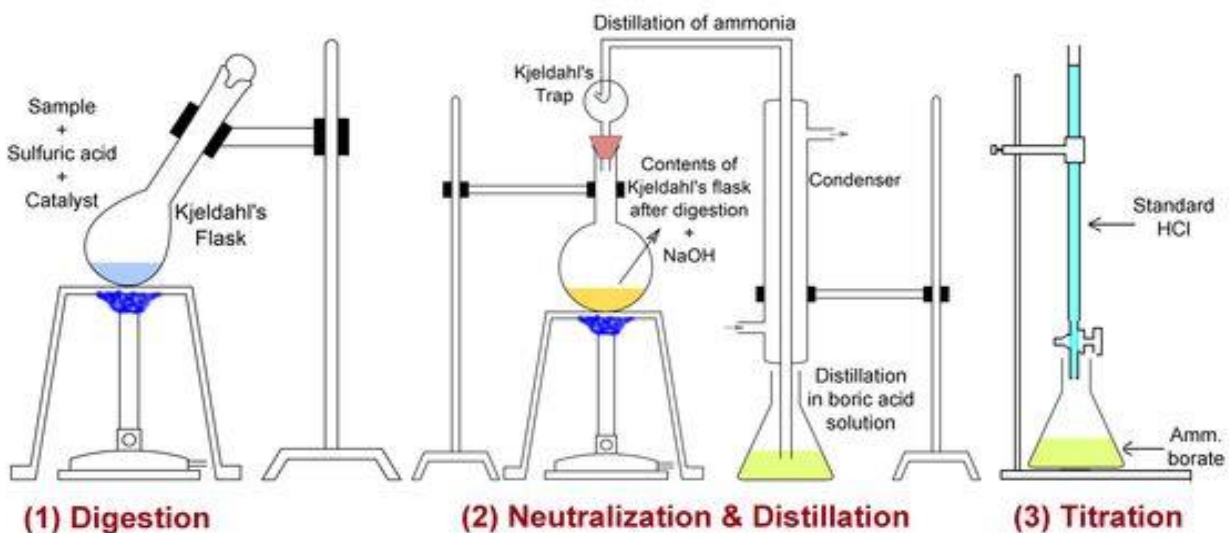
- There are six basic steps in food analysis
- Moisture analysis
- Ash determination
- Protein extraction by kjheldal method

- Fat extraction by soxhelt method
- Crude fiber extraction by fiber tech method
- NFE calculation
- Crude protein estimation

Significance of proteins

- Proteins are polymers of 20 different amino acids
- Differ from each other depending on type, number and sequence of amino acids
- Source of essential amino-acids like lysine, tryptophan, methionine, leucine, isoleucine and valine required for optimal human health.
- Major structural components of natural foods, determining overall texture like tenderness of meat or fish products.
- Proteins used as gelling agents, emulsifiers, foaming agents and thickeners.
- Food proteins are enzymes, capable of enhancing rate of certain biochemical reactions
- Food analysts interested in knowing total concentration, type, molecular structure and functional properties in foods.
- Kjeldahl method for protein:
- Method developed in 1883 by Johann Kjeldahl
- The Kjeldahl method is recognized by Codex Alimentarius as the standard for quantifying milk protein (FAO, 2017).
- Food digested with strong acid releases nitrogen which can be determined by suitable titration technique.
- Amount of protein present calculated from nitrogen concentration of food.
- Same basic approach is still used today, although improvements been made to speed up the process and to obtain accurate measurements.
- Usually considered standard method of determining protein concentration
- Kjeldahl method does not measure protein content directly conversion factor (F), needed to convert measured nitrogen concentration to protein concentration
- A conversion factor of 6.25 (equivalent to 0.16 g nitrogen/ g protein) used, however, this is only an average value, and each protein has a different conversion factor depending on its amino-acid composition

- Kjeldahl method divided 3 steps: digestion, neutralization and titration
- Apparatus & chemicals
- Kjeldhal apparatus
- Digestion flask
- Conical flask
- Stand ,spirit lamp
- Flask holder stand distillation unit
- Condenser
- Titration apparatus



Step 1: Digestion of Proteins

- Digestion
- The food sample to be analyzed is weighed into a digestion flask, digested by heating in presence of sulfuric acid (an oxidizing agent which digests the food), anhydrous sodium sulfate (to speed up the reaction by raising the boiling point) and a catalyst, such as copper, selenium, titanium, or mercury (to speed up the reaction)
- Digestion converts any nitrogen in food (other than that which is in the form of nitrates or nitrites) into ammonia, and other organic matter to CO_2 and H_2O

- Ammonia gas is not liberated in an acid solution because the ammonia is in the form of the ammonium ion (NH_4^+) which binds to the sulfate ion (SO_4^{2-}) and thus remains in solution:
- $\text{N (food)} \longrightarrow (\text{NH}_4)_2\text{SO}_4$

Step 2: Neutralization of Sample

- After digestion, the solution in digestion flask is made alkaline by addition of sodium hydroxide, which converts ammonium sulfate into ammonia gas:

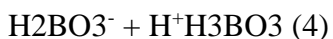


- " Ammonia gas formed is liberated from the solution and moves out of the digestion flask and into the receiving flask which contains an excess of boric acid
- " Low pH of the solution in flask converts ammonia gas into ammonium ion, and simultaneously converts the boric acid to the borate ion:



Step: 3 Titration of Sample

- Nitrogen content estimated by titration of ammonium borate formed with standard sulfuric or hydrochloric acid, using suitable indicator to determine end-point of reaction.



- Concentration of hydrogen ions (in moles) required to reach end-point is equivalent to concentration of nitrogen in food.

Reagents and chemicals

- Kjeldhal apparatus
- Digestion flask
- Fume hood
- Digestion mixture (Copper Sulphate 5%: Potassium Sulphate 94%: Ferrous Sulphate 1%) or digestion tablet
- Concentrated H_2SO_4
- 0.1N H_2SO_4 solution
- 40% NaOH solution
- 4% Boric acid solution

- Methyl Red Indicator

Procedure

- First of all take a digestion flask, clean and dry it
- Take 1-5 (1g for meat and 5 g for cereals, milk 5g) g food sample, 5 g digestion mixture (Copper Sulphate 5%: Potassium Sulphate 94%: Ferrous Sulphate 1%) and 30 mL conc. H₂SO₄ in digestion flask
- Place the flask in the fume hood, digest mixture till solution turns sea light green in color (copper sulfate) raises the temperature and behave as a catalyst (2-3 hours).
- Cool the flask and put the solution in 250 mL volumetric flask followed by dilution with distilled water to reach the top level
- Take 10 mL of diluted sample, add 10 mL of 40% NaOH in it and transfer the flask in tube followed by fitting the tube in distillation apparatus
- Pour 4% 10 mL boric acid solution in a separate beaker and add 2-3 drops of indicator in it. Also put the beaker in distillation assembly.
- During distillation, color of the boric acid solution will change from pink to golden yellow.
- Titrate the distillate against 0.1 N HCl or H₂SO₄ till end point (light pink) comes and note the volume of acid used for titration

Calculations of Proteins

$$\% \text{ Nitrogen} = \frac{\{\text{Volume of H}_2\text{SO}_4 \text{ used} \times \text{Normality of H}_2\text{SO}_4 \times 0.0014 \times \text{Volume of dilution}\} \times 100}{\text{Weight of sample} \times 10}$$

$$\text{Crude protein (\%)} = \text{N2\%} \times 6.25$$

Advantages and disadvantages

Pros.

- “ Kjeldahl method is simple, widely used and standard method for protein comparison.

- “ Has high precision and good reproducibility
- “ Major method for the estimation of protein in foods

Cons.

- “ It does not give a measure of true protein, since all nitrogen in foods is not in the form of protein.
- “ Different proteins need different correction factors due to different amino acid sequences
- “ Use of concentrated sulfuric acid at high temperatures poses a considerable hazard
- “ Method is laborious and time consuming.

Protocol: 2

Crude fat determination in food sample by soxhelt method.

Significance of Lipids

- Major source of energy
- Provide essential nutrients like fatty acids
- Over-consumption of certain lipid components like cholesterol and saturated fats detrimental to health
- Properties of concern regarding lipids in food analysis
- Total lipid concentration
- Type of lipids present (Fatty acid composition)
- Physicochemical properties such as crystallization, melting point, smoke point, rheology, density and color
- Structural organization of lipids in food

Determination of Total Lipid Content

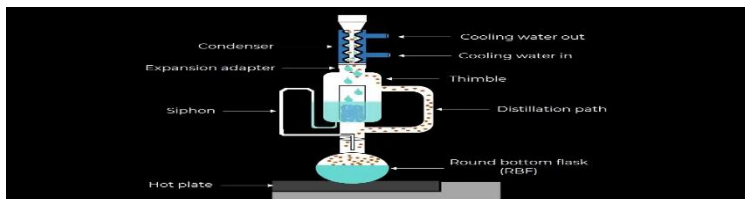
- Total fat content in foods important for reasons
- Economic (not to give away expensive ingredients)
- Legal (to conform standards of identity and nutritional labeling laws)
- Health (development of low fat foods)
- Quality (food properties depend on total lipid content)
- Processing (processing conditions depend on total lipid content)
- Soxhlet method is most preferred method for determination

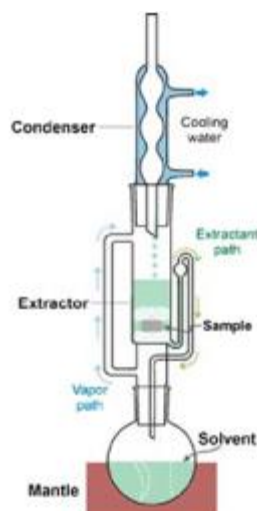
Principle of fat extraction

- Lipids are insoluble in water and soluble in organic solvents is basis for separating lipids in foods from water soluble components such as proteins, carbohydrates and minerals
- In fact, solvent extraction techniques most commonly used method of isolating lipids from foods and determining total lipid content

Reagents and chemicals

- Soxhlet apparatus
- Thimbles
- Heating mantles
- Filter paper
- Aluminum dishes
- Analytical balance
- Petroleum ether or Hexane as organic solvent





Sample Preparation

Sample preparation involves following

Drying sample

It is necessary as organic solvents cannot easily penetrate into foods having water and extraction is inefficient.

Particle size reduction to produce homogeneous sample that increase surface area of lipid exposed to solvent.

Acid hydrolysis

Some foods contain lipids as lipoproteins or glycolipids necessary to break bonds of lipid with non-lipid components before extraction. Acid hydrolysis is commonly used to release bound lipids by digesting it by heating for 1 hour in 3N HCl acid.

Solvent Selection

Ideal solvent for extraction is critical as it would completely extract all lipid components from food.

Efficiency of solvent extraction depends on polarity of lipids compared to solvent polarity.

Procedure

1. Take a filter paper and weigh it (W1).
2. " Accurately weigh representative dry sample (5g) in paper thimble (W1+5g).
3. " Place thimble in Soxhlet apparatus for lipid extraction.
4. " Extract fat from food sample using petroleum ether for at least 8-12 cycles.

5. " Siphon off:
6. " After complete extraction, turn heat off, remove samples with filter paper, evaporate Petroleum ether by placing them in oven at 70- 100 °C till constant weight is achieved .
7. " Cool to room temperature. (Excessive drying may oxidize fat).
8. " Now weigh again with filter paper and samples after extraction

Annexure D: Teacher and Course Evaluation

Instructor Name: Mr. Mehtab Ahmad

Course: HND-607 Research Methods in Nutrition

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 78% and 22% were strongly agreed and agreed respectively. The Instructor shows respect towards students and encourages class participation.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
Description	S.A	A	UC	D	S.D
The instructor is prepared for each class.	78%	22%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	78%	22%	0%	0%	0%
The instructor has completed the whole course.	78%	22%	0%	0%	0%
The instructor provides additional material apart from the textbook.	67%	33%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	67%	33%	0%	0%	0%
The instructor communicates the subject matter effectively.	78%	22%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	67%	33%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	67%	33%	0%	0%	0%
The instructor arrives on time.	78%	22%	0%	0%	0%
The instructor leaves on time.	78%	22%	0%	0%	0%
The instructor has completed all classes regularly.	78%	22%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	78%	22%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	67%	33%	0%	0%	0%

The instructor was available during the specified hours on office and after class for consultations.	78%	22%	0%	0%	0%
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Instructor Name: Mr. Muhammad Bilal

Course: HND-403 Macro and Micro Nutrients in Human Nutrition

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 68% and 32% were strongly agreed and agreed respectively that instructor was available during the specified office hours and for after class consultations.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
The Instructor is prepared for each class.	68%	32%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	68%	32%	0%	0%	0%
The Instructor has completed the whole course.	77%	23%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	64%	32%	5%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	64%	36%	0%	0%	0%
The Instructor communicates the subject matter effectively.	64%	36%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	68%	27%	5%	0%	0%
The Instructor maintains an environment that is conducive to learning.	73%	23%	5%	0%	0%
The Instructor arrives on time.	68%	27%	5%	0%	0%
The Instructor leaves on time.	73%	23%	5%	0%	0%
The instructor has completed all classes regularly.	77%	23%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	59%	41%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	68%	32%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	68%	32%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	68%	27%	5%	0%	0%

The assignments and exams covered the materials presented in the course.	59%	36%	5%	0%	0%
The course material is modern and updated	77%	23%	0%	0%	0%

Instructor Name: Mr. Hasham Yasir

Course: HND-611 Nutritional Deficiency Disorders

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 77% and 12% were strongly agreed and agreed respectively that instructor was available during the specified office hours and for after class consultations.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
The Instructor is prepared for each class.	88%	8%	0%	4%	0%
The Instructor demonstrates knowledge of the subject.	92%	8%	0%	0%	0%
The Instructor has completed the whole course.	85%	4%	8%	4%	0%
The Instructor provides additional material apart from the textbook.	77%	19%	0%	4%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	73%	15%	12%	0%	0%
The Instructor communicates the subject matter effectively.	77%	23%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	96%	4%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	92%	8%	0%	0%	0%
The Instructor starts the class on time.	77%	12%	12%	0%	0%
The Instructor ends the class on time.	85%	8%	8%	0%	0%
The instructor has completed all classes regularly.	85%	15%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	88%	12%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	85%	15%	0%	0%	0%
The Instructor was available during the specified hours for consultation..	77%	12%	12%	0%	0%

The course integrates theoretical course concepts with real-world applications.	73%	23%	4%	0%	0%
The assignments and exams covered the materials presented in the course.	88%	12%	0%	0%	0%
The course material is modern and updated.	88%	12%	0%	0%	0%

Instructor Name: Ms. Syeda Amina Iqbal

Course: HND-508 Nutritional Practices in Clinical Care

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 67% and 22% were strongly agreed and agreed respectively the course integrates theoretical course concepts with real-world applications.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
The Instructor is prepared for each class.	67%	22%	11%	0%	0%
The Instructor demonstrates knowledge of the subject.	67%	22%	11%	0%	0%
The Instructor has completed the whole course.	67%	22%	11%	0%	0%
The Instructor provides additional material apart from the textbook.	67%	22%	11%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	67%	22%	11%	0%	0%
The Instructor communicates the subject matter effectively.	67%	22%	11%	0%	0%
The Instructor shows respect towards students and encourages class participation	67%	22%	11%	0%	0%
The Instructor maintains an environment that is conducive to learning.	78%	11%	11%	0%	0%
The Instructor arrives on time.	67%	22%	11%	0%	0%
The Instructor leaves on time.	67%	22%	11%	0%	0%
The instructor has completed all classes regularly.	67%	22%	11%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	67%	11%	22%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	78%	11%	11%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	78%	11%	11%	0%	0%
The course integrates theoretical course concepts with real-world applications.	67%	22%	11%	0%	0%

The assignments and exams covered the 67% 22% 11% 0% 0% materials presented in the course.

The course material is modern and updated 78% 11% 11% 0% 0%

The teacher is fair in exams. 78% 11% 11% 0% 0%

Instructor Name: Mr. Muhammad Usama

Course: IS-401 Islamic Studies

The student's response has been observed satisfactory about the completion of course, demonstration and about the provision of additional course material. Majority of the students were strongly agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
The Instructor is prepared for each class.	80%	20%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	80%	20%	0%	0%	0%
The Instructor has completed the whole course.	80%	20%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	80%	20%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	90%	10%	0%	0%	0%
The Instructor communicates the subject matter effectively.	80%	20%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	80%	20%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	80%	20%	0%	0%	0%
The Instructor arrives on time.	90%	10%	0%	0%	0%
The Instructor leaves on time.	90%	10%	0%	0%	0%
The instructor has completed all classes regularly.	90%	10%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	80%	20%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	90%	10%	0%	0%	0%

The Instructor was available during the specified hours on office and after class for consultations.	90%	10%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	90%	10%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	90%	10%	0%	0%	0%
The course material is modern and updated	80%	20%	0%	0%	0%
The teacher is fair in exams.	80%	20%	0%	0%	0%
The Instructor is prepared for each class.	80%	20%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	80%	20%	0%	0%	0%
The Instructor has completed the whole course.	80%	20%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	80%	20%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	90%	10%	0%	0%	0%
The Instructor communicates the subject matter effectively.	80%	20%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	80%	20%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	80%	20%	0%	0%	0%

Instructor Name: Ms. Arshi Shehla

Course: HND-513 Public Health Nutrition

The student's response has been observed satisfactory about the completion of course, demonstration and about the provision of additional course material. The 100% students were strongly agree. All students were strongly agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
The instructor is prepared for each class.	100%	0%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The instructor has completed the whole course.	100%	0%	0%	0%	0%
The instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The instructor starts the class on time.	100%	0%	0%	0%	0%
The instructor ends the class on time.	100%	0%	0%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The instructor was available during the specified hours for consultation.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%

The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated.	100%	0%	0%	0%	0%
The instructor is prepared for each class.	100%	0%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The instructor has completed the whole course.	100%	0%	0%	0%	0%
The instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The instructor starts the class on time.	100%	0%	0%	0%	0%

Instructor Name: Ms. Manahil Saud

Course: SSH-301 Ideology and Constitution of Pakistan

The student's response has been observed satisfactory about the completion of course, demonstration and about the provision of additional course material. The 100% were strongly agree. All students were strongly agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	S. A	A	UC	D	S. D
The Instructor is prepared for each class.	100%	0%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor has completed the whole course.	100%	0%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The Instructor communicates the subject matter	100%	0%	0%	0%	0%

effectively.					
The Instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The Instructor arrives on time.	100% 100% 100%	0%	0%	0%	0%
The Instructor leaves on time.	90%	0%	0%	0%	0%
The instructor has completed all classes regularly.	70%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor was available during the specified hours on office and after class for consultations.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	100% 100%	0%	0%	0%	0%
The teacher is fair in exams.	100%	0%	0%	0%	0%
The Instructor is prepared for each class.	100%	0%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor has completed the whole course.	100%	0%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	100%	0%	0%	0%	0%
The Instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%

The Instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
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Annexure E: Teacher Feedback on Teacher and Course Evaluation

Performa 10/1: Teacher & Course Evaluation Feedback Fall-2024

S. no	Instructor Name	Courses	Class	Remarks
1	Mr. Mehtab Ahmad	HND-607 Research Methods in Nutrition	BS HND (7)	A
		HND-507 Nutritional Education and Awareness	BS HND (5)	A
		FST-407 Food Laws and Regulation	BS HND (3)	A
		FST-303 Food Processing and preservation	BS HND (2)	A
Note: write your remarks as per the instructions i.e.				
S. A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S. D: (Strongly Disagree)				
Feedback:				
More work on the time management of the class and lecture preparation				
Mention area of improvement:				
In the academic work in series more practical work needed				

Nimrah Ashraf

Head QED | Nimrah Ashraf

Mehtab Ahmad

Signature

Date: March 18 ,2024

Performa 10/1: Teacher & Course Evaluation Feedback

Fall-2024

S. no	Instructor Name	Courses	Class	Remarks
1	Mr. Irfan Bashir	ENG-301	BS-HBD (IST)	A

Note: write your remarks as per the instructions i.e.

S.A:(Strongly Agree) **A:**(Agree) **UC:**(Uncertain) **D:**(Disagree) **S.D:**(Strongly Disagree)

Feedback:

University should update the outline as it is very short and add more grammatical aspects of English in course.

Mention area of improvement:

Please give your suggestions for academic improvements: The maintenance of the portal is very important, so that, teachers can upload the marks of assignments and quizzes on portal side by side.

Nimrah Ashraf

Head QED | Nimrah Ashraf

Irfan Bashir

Signature

Date: March 19, 2024

Performa 10/1: Teacher & Course Evaluation Feedback Fall-2024

S. no	Instructor Name	Courses	Class	Remarks
1	Mr. Muhammad Bilal	HND-603 Food and Drug Interactions	BS HND (7)	UC
		HND-605 Global Food Issues	BS HND (7)	UC
		HND-501 Dietetics I	BS HND (5)	A
		HND-403 Micro and Macronutrients in Human Nutrition	BS HND (3)	A
Note: write your remarks as per the instructions i.e.				
S.A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S.D: (Strongly Disagree)				
Feedback:				
Satisfied				
Mention area of improvement:				
More work on the time management of the class and lecture preparation				

Nimrah Ashraf

Head QED | Nimrah Ashraf

Muhammad Bilal

Signature

Date: March 18 ,2024

Performa 10/1: Teacher & Course Evaluation Feedback Spring-2024

S. no	Instructor Name	Courses	Class	Remarks
1	Ms. Amina Iqbal	HND-502 Dietetics II	BS HND (6)	UC
		HND-506 Nutrition Through Lifecycle	BS HND (6)	UC
		HND-404 Metabolism of Nutrients	BS HND (4)	A
		HND-508 Nutritional Practices in Clinical Care	BS HND (6)	A
Note: write your remarks as per the instructions i.e.				
S.A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S.D: (Strongly Disagree)				
Feedback:				
Satisfied				
Mention area of improvement:				
More work on the time management of the class and lecture preparation				

Nimrah Ashraf

Head QED | Nimrah Ashraf

Amina Iqbal

Signature

Date: July 18 ,2024

Performa 10/1: Teacher & Course Evaluation Feedback Spring-2024

S. no	Instructor Name	Courses	Class	Remarks
1	Mr. Arshi Batool	HND-510 Infant and Young Child Feeding	BS HND (6)	A
		HND-512 Medical Nutrition Therapy	BS HND (6)	A
		HND-408 Nutrition Epidemiology	BS HND (4)	A
		HND-412 Assessment of Nutritional Status	BS HND (4)	A
Note: write your remarks as per the instructions i.e.				
S.A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S.D: (Strongly Disagree)				
Feedback:				
Lab Equipment and resources, Scientific tours				
Mention area of improvement:				
Greater access to practical involvement and scientific collaboration will pave way for more improvements				

Nimrah Ashraf

Head QED | Nimrah Ashraf

Arshi Batool

Signature

Date: July 18 ,2024

Performa 10/1: Teacher & Course Evaluation Feedback Spring-2024

S. no	Instructor Name	Courses	Class	Remarks
1	Mr. Muhammad Usama	TOQ-2 Translation of Quran-2	BS HND (6)	A
		TOQ-2 Translation of Quran-2	BS HND (4)	A
		IS/ET-302 Islamic Studies/Ethics	BS HND (2)	A
Note: write your remarks as per the instructions i.e.				
S.A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S.D: (Strongly Disagree)				
Feedback: N/A				
Mention area of improvement: Course outlines of some courses need to be updated.				

Nimrah Ashraf

Head QED | Nimrah Ashraf

Muhammad Usama

Signature

Date: July 18 ,2024

Performa 10/1: Teacher & Course Evaluation Feedback Fall-2023

S. no	Instructor Name	Courses	Class	Remarks
8	Ms. Amina Iqbal	HND-401 Food Safety and Quality Management	BS HND (3rd)	UC
		FST-303 Food Processing and Preservation	BS HND (1st)	UC
Note: write your remarks as per the instructions i.e. S.A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S.D: (Strongly Disagree)				
Feedback: Mention area of improvement: -- Please give your suggestions for academic improvements: The area of study is important, practical assignment and more lab work is required.				

Nimrah Ashraf

QED | Nimrah Ashraf

Amina Iqbal

Signature

Date: March 03, 2022

Performa 10/1: Teacher & Course Evaluation Feedback Fall-2023

S. no	Instructor Name	Courses	Class	Remarks
13	Ms. Manahil Saud	SSH-301- Ideology and Constitution of Pakistan	BS-HND (1st)	S.A
		OS-301 Moral Foundation of Education	BS-HND (Ist)	S.A
Note: write your remarks as per the instructions i.e.				
S.A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S.D: (Strongly Disagree)				
Feedback: Satisfactory Mention area of improvement: Please give your suggestions for academic improvements:				

Nimrah Ashraf

Member QED | Nimrah Ashraf

Manahil Saud
Signature

Date: March 03, 2023

Performa 10/1: Teacher & Course Evaluation Feedback Fall-2023

S. no	Instructor Name	Courses	Class	Remarks
17	Ms. Isbah Inam	HND-501 Dietetics I	BS-HND (5)	S.A
		HND-507 Nutritional Education and Awareness	BS HND (5)	S.A
Note: write your remarks as per the instructions i.e.				
S.A: (Strongly Agree) A: (Agree) UC: (Uncertain) D: (Disagree) S.D: (Strongly Disagree)				
Feedback: Student's performance was satisfactory. Mention area of improvement: Outline needed to be improved, must be structured according to discipline. Please give your suggestions for academic improvements: Student's advisory management are required for their wellbeing.				

Nimrah Ashraf

Member QED | Nimrah Ashraf

Isbah Inam

Signature

Date: March 03, 2023

Performa 10/1: Teacher & Course Evaluation Feedback Spring-2023

S. no	Instructor Name	Courses	Class	Remarks
17	Mr. Zarq Bhagga	STAT-302 Statistics and Biometry	BS HND(1)	S.A
<p>Note: write your remarks as per the instructions i.e. S.A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S.D:(Strongly Disagree)</p>				
<p>Feedback: Student's performance was satisfactory.</p> <p>Mention area of improvement:</p> <p>Please give your suggestions for academic improvements:</p>				

Nimrah Ashraf

Member QED | Nimrah Ashraf

Maria Ashraf

Signature

Date: March 03,, 2022

Annexure F: Faculty Survey

Performa: 5 Faculty Survey Report (Spring 2023)

Department of Sciences

S.no	Statements	VS	SA	UC	DS	VD
1	Your mix of research teaching and community service	60%	40%	0%	0%	0%
2	The intellectual stimulation of your work	80%	20%	0%	0%	0%
3	Type of teaching / research you currently do	60%	40%	0%	0%	0%
4	Your interaction with students	40%	60%	0%	0%	25%
5	Cooperation you receive form colleagues	60%	40%	0%	0%	0%
6	The mentoring (guidance) available to you	20%	60%	20%	0%	0%
7	Administrative support from the department	20%	60%	20%	0%	0%
8	Providing clarity about the faculty promotion process	0%	60%	40%	25%	0%
9	Your prospects for advancement and progress through ranks	0%	80%	20%	0%	0%
10	Salary and compensation package	0%	20%	60%	20%	0%
11	Job security and stability at the department	100%	0%	0%	0%	0%
12	Amount of time you have for yourself and family	0%	40%	40%	20%	0%
13	The overall climate at the department	20%	80%	0%	0%	0%
14	Whether the department is utilizing your experience and knowledge	100%	0%	0%	0%	0%
VS: Very Satisfied SA: Satisfied UC: Uncertain DS: Dissatisfied VD: Very Dissatisfied						

Performa: 5 Faculty Survey Report-Spring 2024

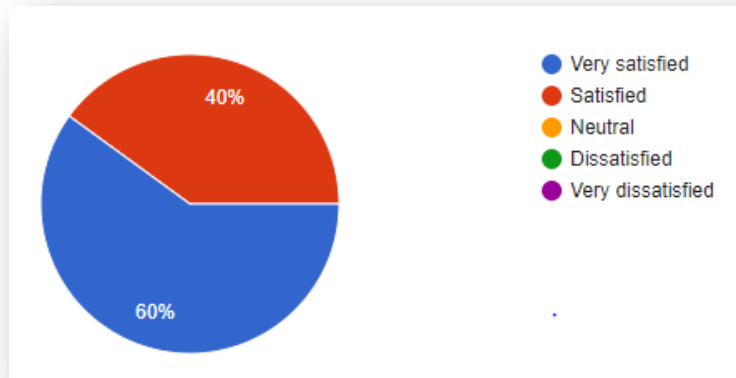
Department of Sciences

S.no	Statements	VS	SA	UC	DS	VD
1	Your mix of research teaching and community service	12.5%	75%	0%	12.5%	0%
2	The intellectual stimulation of your work	25%	62.5%	0%	12.5%	0%
3	Type of teaching / research you currently do	12.5%	75%	0%	12.5%	0%
4	Your interaction with students	37.5%	50%	0%	12.5%	25%
5	Cooperation you receive from colleagues	25%	50%	12.5%	12.5%	0%
6	The mentoring (guidance) available to you	12.5%	87.5%	0%	0%	0%
7	Administrative support from the department	25%	62.5%	0%	12.5%	0%
8	Providing clarity about the faculty promotion process	0%	50%	25%	12.5%	12.5%
9	Your prospects for advancement and progress through ranks	0%	62.5%	12.5%	25%	0%
10	Salary and compensation package	0%	62.5%	25%	12.5%	0%
11	Job security and stability at the department	0%	75%	25%	0%	0%
12	Amount of time you have for yourself and family	0%	50%	50%	0%	0%
13	The overall climate at the department	25%	75%	0%	0%	0%
14	Whether the department is utilizing your experience and knowledge	0%	75%	12.5%	12.5%	0%
VS: Very Satisfied SA: Satisfied UC: Uncertain DS: Dissatisfied VD: Very Dissatisfied						

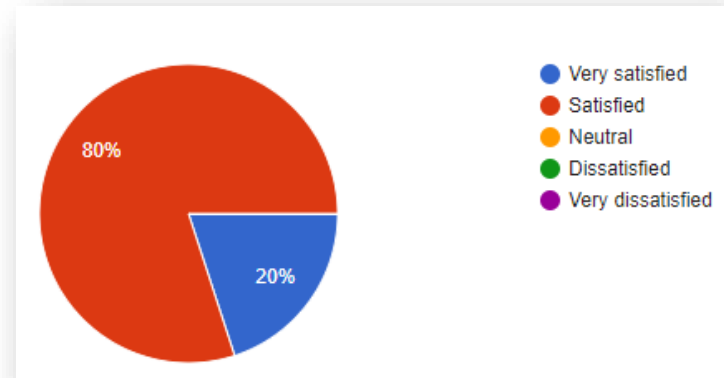
Performa: 5 Faculty Survey Report Spring 2023

Department of Nutritional Sciences

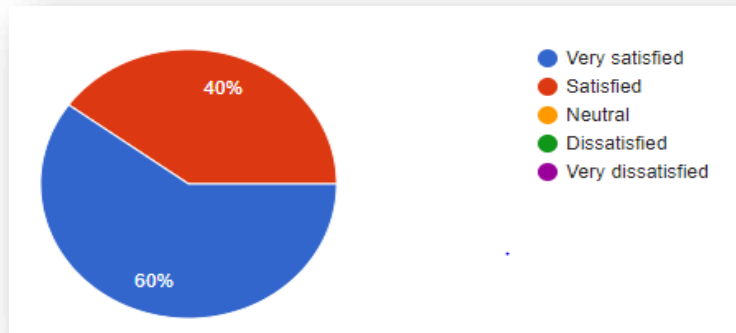
1. Your mix of research teaching and community service.



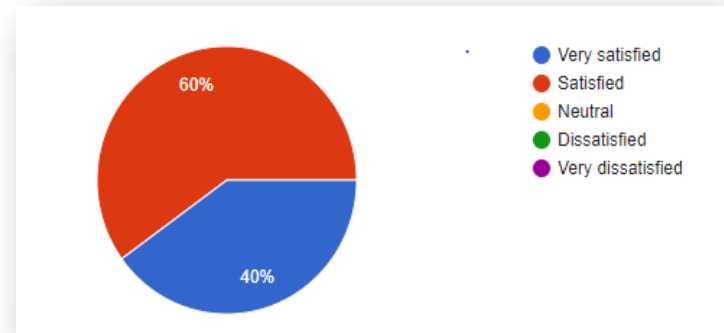
2. The intellectual stimulation of your work.



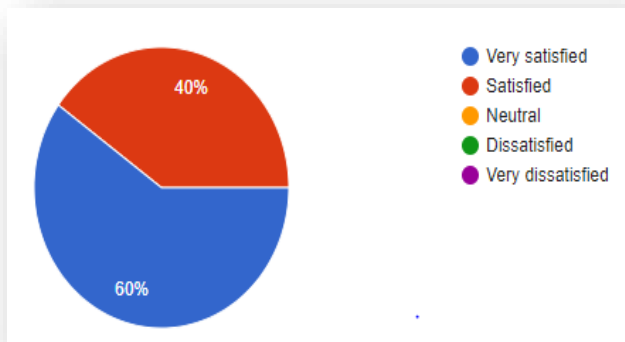
3. Type of teaching / research you currently doing.



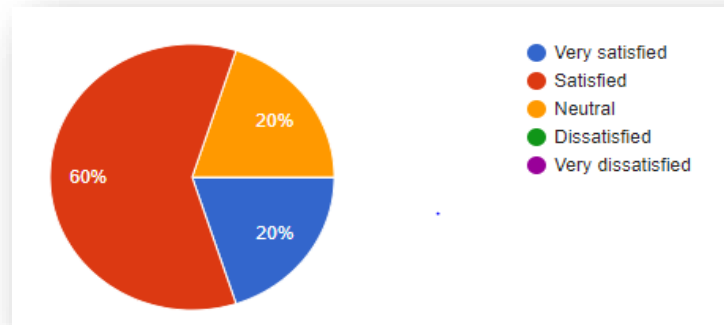
4. Your interaction with students.



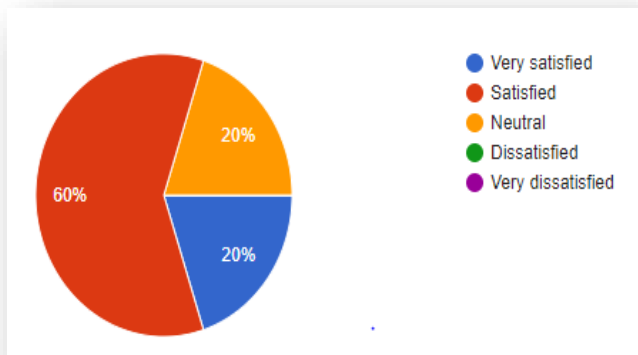
5. Cooperation you receive form colleagues.



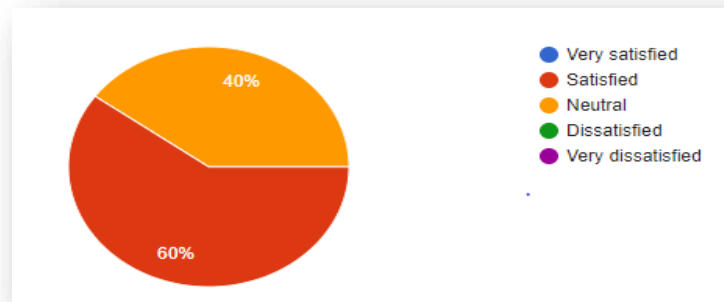
6. The mentoring (guidance) available to you.



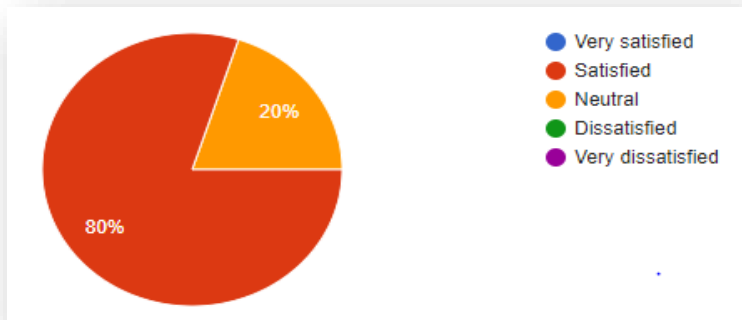
7. Administrative support from the department.



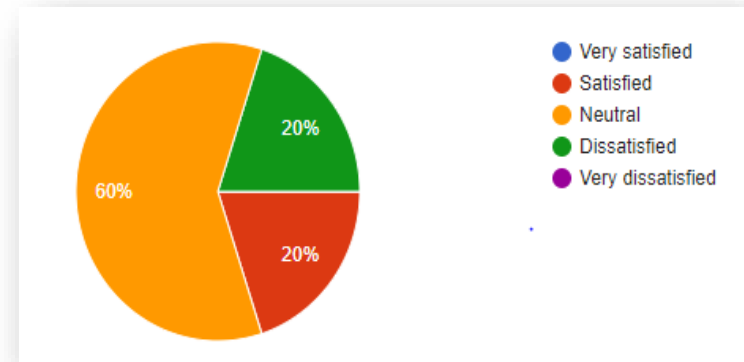
8. Providing clarity about the faculty promotion process.



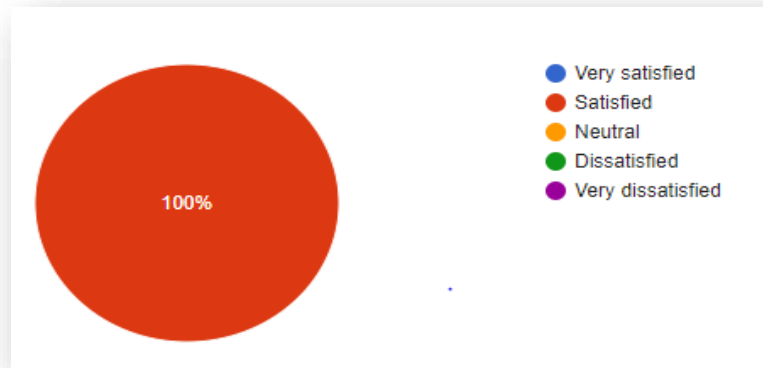
9. Your prospects for advancement and progress through ranks.



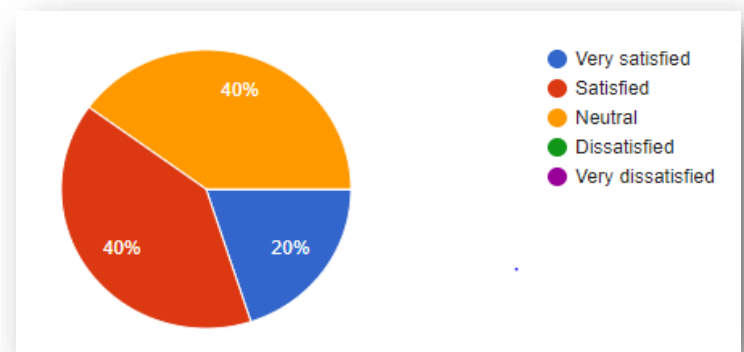
10. Salary and compensation package.



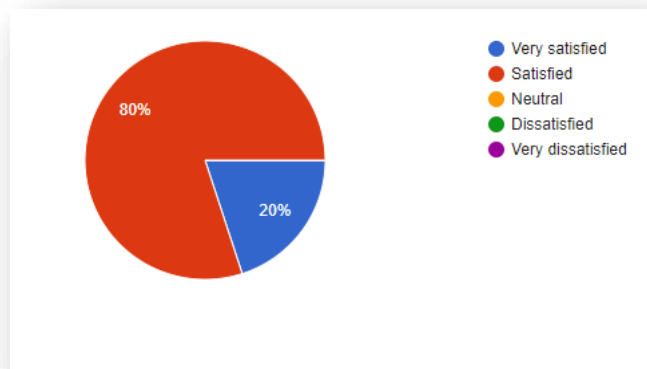
11. Job security and stability at the department.



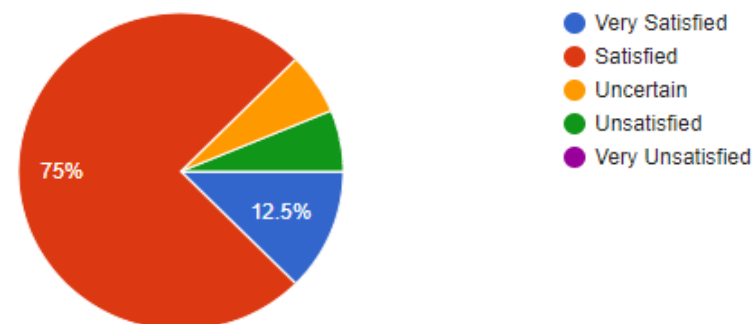
12. Amount of time you have for yourself and family.



13. The overall environment at the department.

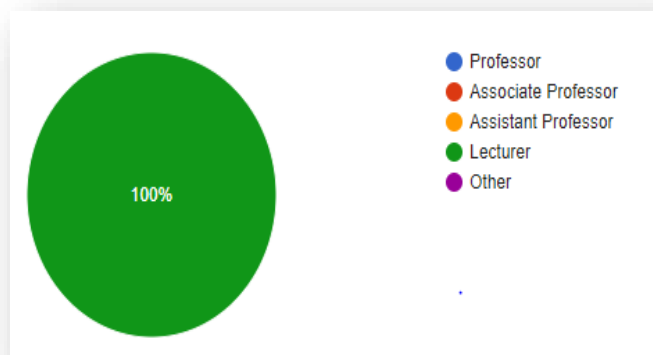


14. Whether the department is utilizing your experience and knowledge.

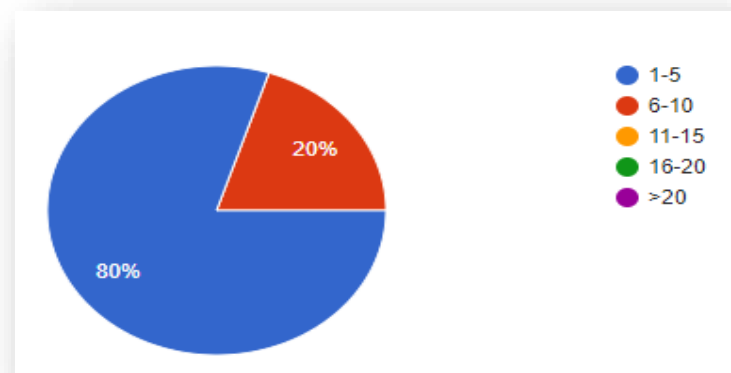


Information About Faculty

i. Academic Rank



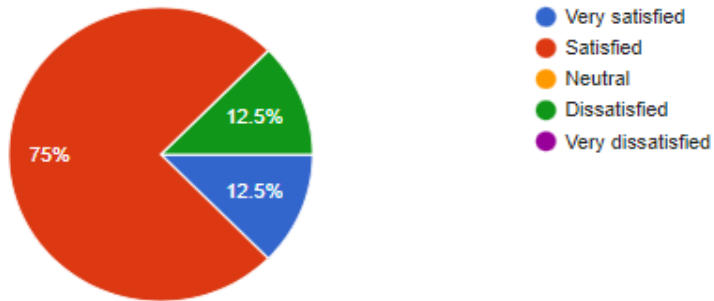
ii. Years of Service



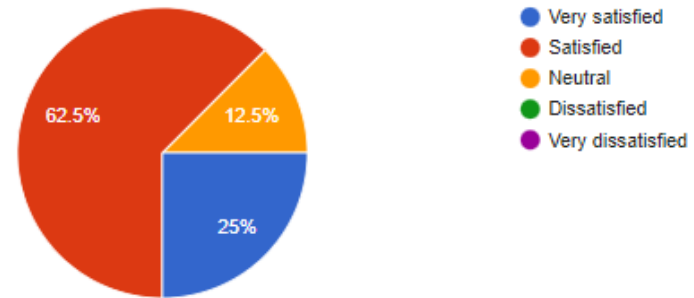
Performa: 5 Faculty Survey Report Spring 2024

Department of Nutritional Sciences

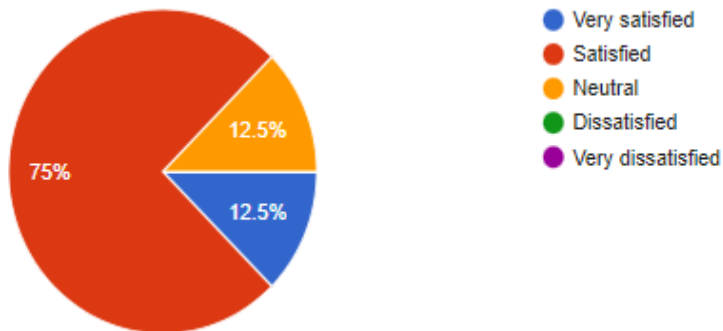
1. Your mix of research teaching and community service.



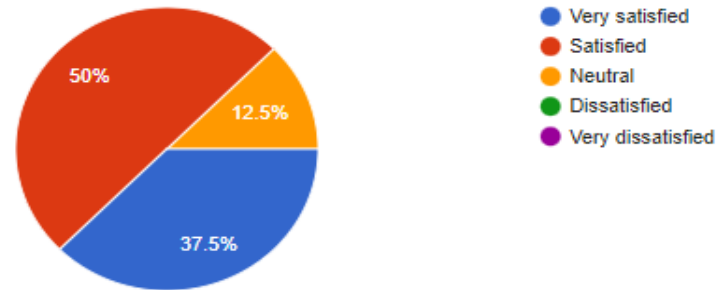
2. The intellectual stimulation of your work.



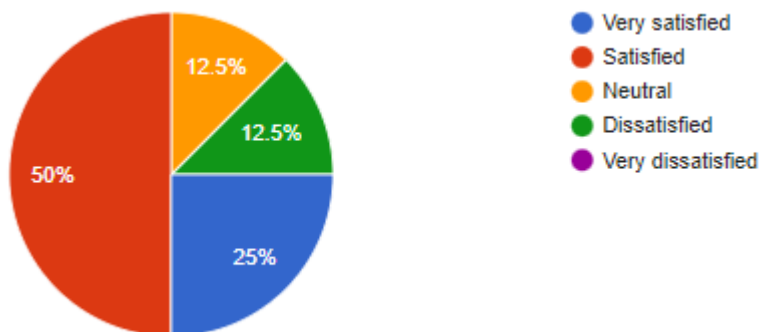
3. Type of teaching / research you currently doing.



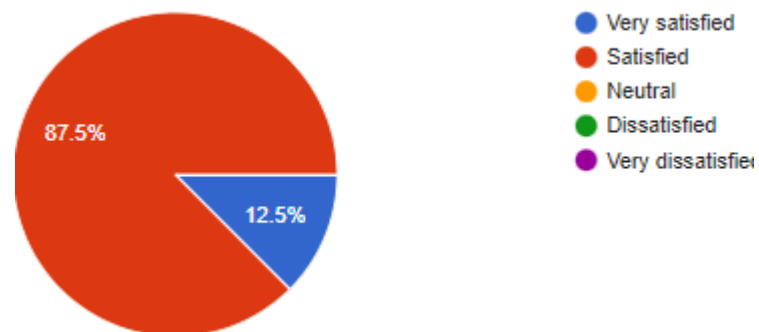
4. Your interaction with students.



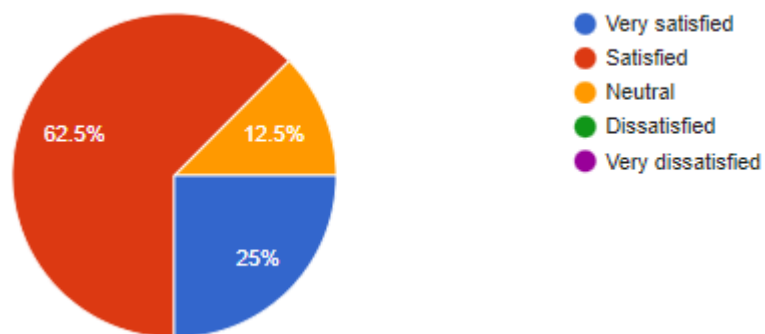
5. Cooperation you receive form colleagues .



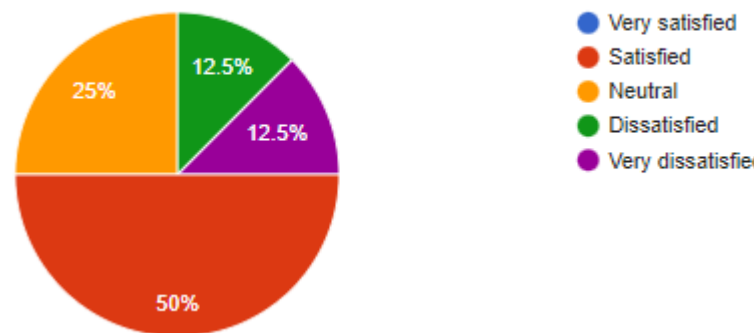
6. The mentoring (guidance) available to you.



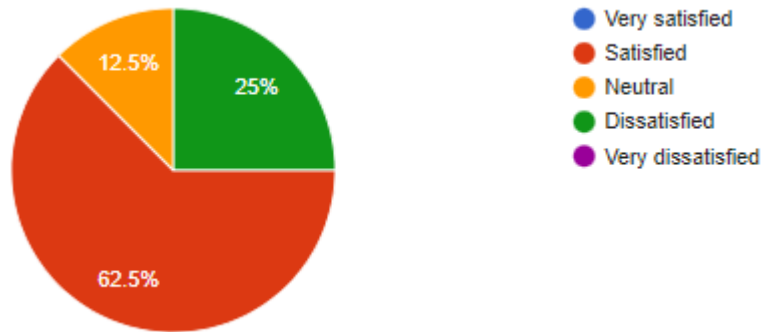
7. Administrative support from the department .



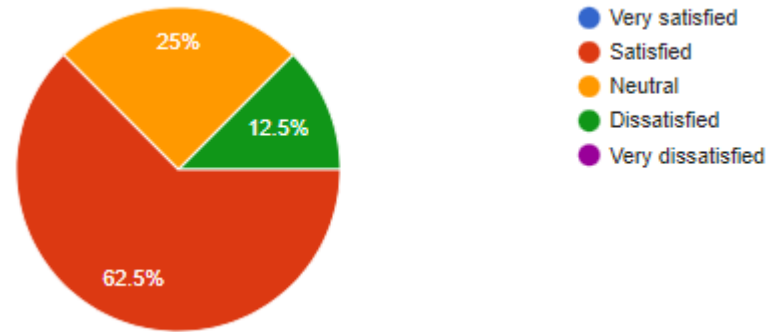
8. Providing clarity about the faculty promotion process .



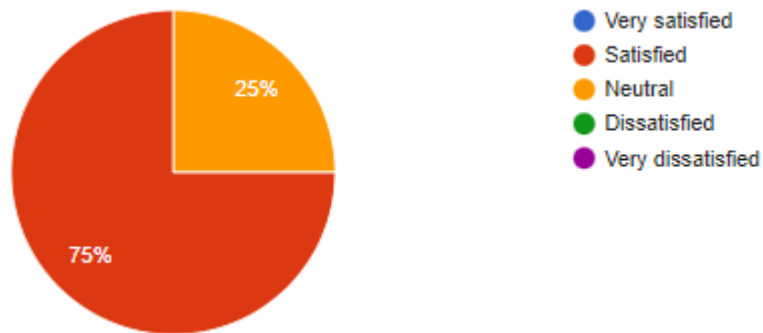
9. Your prospects for advancement and progress through ranks.



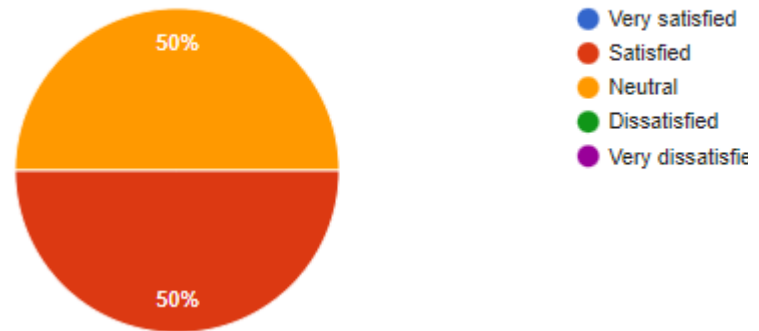
10. Salary and compensation package.



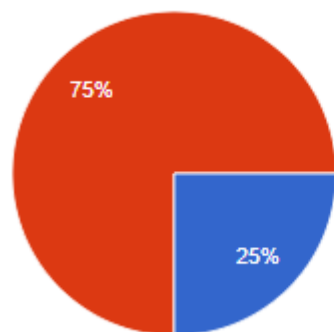
11. Job security and stability at the department.



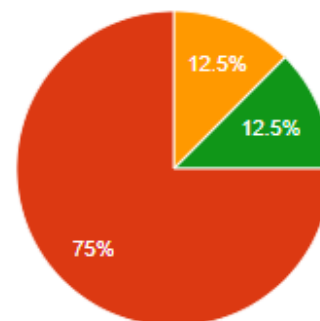
12. Amount of time you have for yourself and family.



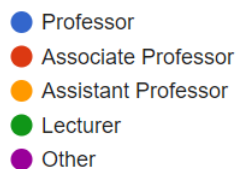
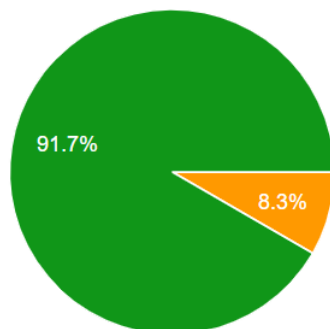
13. The overall environment at the department.



14. Whether the department is utilizing your experience and knowledge.

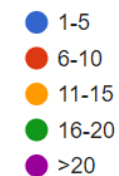
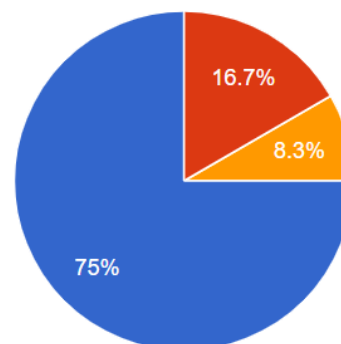


iii. Academic Rank



Information About Faculty

iv. Years of Service



Annexure G: Faculty Course Review

<h3>Faculty Course Review Report</h3> <p>(To be filled by each teacher at the time of Course Completion)</p> <p>For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline</p>									
Department:	Human Nutrition and Dietetics				Faculty:	Sciences			
Course Code:	HND-304		Title:		Human Physiology I				
Session:	Spring 2023-2024		Semester:	2nd					
Credit Value:	3(2-2)		Level:	Bs (hons)		Prerequisites:			
Name of Course Instructor:	Saba Akhtar		No. of Students Contact Hours		Lectures		33		
			19		Seminars		Nil		
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc.)			Quiz (3), assignments (2), presentations (1), project (1) (10%) midterm (40%), final term (50%), Practical, viva, copy semester performance (2%)						
Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	F	With drawl	Total
No. of Students	21	19.05 %	23.81 %	23.81%	28.5 7%	4. 76 %	0%	0	100 %
Saba Akhtar					Date: 26/06/2024				

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion)
For completion by the course instructor and transmission to Head of
Department of his/her nominee (Dept. Quality Officer) together with copies
of the Course Syllabus outline

Department:	Human Nutrition and Dietetics			Faculty:	Sciences				
Course Code:	HND-302		Title:	Human Anatomy					
Session:	Spring 2023-2024		Semester:	2nd					
Credit Value:	3(2-2)		Level:	BS		Credit Value:	3(2-2)		
Name of Course Instructor:	Hammad Elahi		No. of Students	Lectures		33			
Contact Hours			Seminars		Nil				
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc.)			Quiz (3), assignments (2), presentations (1), project (1) (10%) midterm (40%), final term (50%), Practical, viva, copy, semester performance (2%)						
Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	F	With drawl	Total
No. of Students	21	42.86 %	28.57%	23.81%	4.76 %	0%	0%	0	100 %
<div>Itrat Fatima Toor</div> <div>Date: 4/07/2024</div>									

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion)
For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Human Nutrition and Dietetics				Faculty:	Sciences			
Course Code:	HND-403	Title:			Micro and Macronutrients in Human Nutrition				
Session:	Fall 2023-2024	Semester:	3rd						
Credit Value:	3(3-0)	Level:	BS		Credit Value:	3(2-1)			
Name of Course Instructor:	Muhammad Bilal	No. of Students		Lectures		33			
		Contact Hours		Seminars		Nil			
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc.)		Quiz (3), assignments (2), presentations (1), project (1) (10%) midterm (40%), final term(50%) ,Practical, viva, copy ,semester performance (2%)							
Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	F	With drawl	Total
No. of Students	20	15 %	30 %	45%	10%	0 %	0%	0	100 %
Muhammad Bilal					Date: 8/02/2025				

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Human Nutrition and Dietetics			Faculty:	Sciences				
Course Code:	HND-407	Title:		Food Safety and Quality Management					
Session:	Fall-2023-2024	Semester:	3rd						
Credit Value:	3(3-0)	Level:	BS		Credit Value:	3(3-0)			
Name of Course Instructor:	Muhammad Hasham Yasir	No. of Students Contact Hours		Lectures	34				
		99		Seminars	Nil				
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc)		Quiz (4), Assignments (4), Presentation (1), 10%, midterm 40%, final 50% theory. Class activities ,surveys							
Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	F	With drawl	Total
No. of Students	20	85%	15%	0%	0%	0 %	0%	0	100 %
Hasham Yasir					Date: 10/02/2025				

Annexure H: Faculty Resume

Proforma No-09			
Faculty Resume			
Name	Mehtab Ahmad		
Personal	Department: Human Nutrition and Dietetics Date of Appointment: 07 Oct 2024 Email Address: mehtab4321ahmada@gmail.com Contact No: 0326-1403988		
Experience	Designation	Institute	No. of Years
	Lecturer/ Coordinator	Arid Institute of Sciences	5 months-till now
Honor and Awards	<ul style="list-style-type: none"> Awarded with Prime Minister Laptop Attended Conference on “Milk composition of Different Regions” 		
Memberships	NIL		
Post Graduate Students	NIL		
Undergraduate Students	NIL		
Honour Students	NIL		
Service Activity	Teaching and Research		
Brief Statement of Research Interest	Type 1 diabetes, Nutrition and immune system		
Publications	Under Review (Ameliorating Implications of Guava (<i>Psidium Guajava</i>) L. against Metabolic Syndrome-A review		
Research grants and Contracts.	NIL		
Other Research or Creative Accomplishments	NIL		
Selected Professional Presentations	NIL		

Performa 9 Faculty Resume			
Name	Muhammad Aqib		
Personal	Department: Human Nutrition and Dietetics Date of Appointment: 03-10-2022 Email Address: maqibniaz595@gmail.com Contact No: +923154618480 feel is pertinent.		
Experience	Designation	Institute	No. of Years
	Lecturer	Sutlej College of Allied Health Sciences, Bahawalpur	6 months
	Lecturer	Government College University Faisalabad-Layyah Campus	6 months
	Lecturer	Gujrat Institute of Management Sciences	1 year
Honor and Awards	N/A		
Memberships	N/A		
Post Graduate Students	N/A		
Undergraduate Students	N/A		
Honor Students	N/A		
Service Activity	N/A		
Brief Statement of Research Interest	I am focused on studying how active substances in different foods impact human health, particularly in the digestive tract, liver, and kidneys. Currently, my dissertation is centered around researching the effects of turnip consumption on liver biomarkers using an in vivo human study. I'm committed to expanding my knowledge of various active ingredients in foods. Ultimately, I aspire to specialize in dietary strategies that utilize these active components to reduce adverse drug reactions and improve human well-being.		
Publications	Etiology, Mechanism and Treatment of Liver Cancer		
Research grants and Contracts.			
Selected Professional Presentations			

Performa 9			
Faculty Resume			
Name	Muhammad Bilal		
Personal	Department: Human Nutrition and Dietetics Date of Appointment: 7 Oct, 2024 Email Address: dietitianbilal200@gmail.com Contact No: 03026718779		
Experience	Designation	Institute	No. of Years
	lecturer	Arid Institute of Sciences	5 months
Honor and Awards	N/A		
Memberships	N/A		
Post Graduate Students	N/A		
Undergraduate Students	N/A		
Honour Students	N/A		
Service Activity	N/A		
Brief Statement of Research Interest	Evaluation and therapeutic effect of <i>Grewia asitica</i> (Phalsa) on diabetes mellitus.		
Research grants and Contracts.	N/A		
Other Research or Creative Accomplishments			
Selected Professional Presentations			

Performa 9 Faculty Resume			
Name	Syeda Amina Iqbal Fatima		
Personal	Department: Human Nutrition and Dietetics Date of Appointment: 25-09-2023 Email Address: dnsyedaamina@gmail.com Contact No: 0310-5454908 is pertinent.		
Experience	Dietitian	Zaheer Medical Centre	6 months
	Lecturer	Arid Institute of Sciences	1 year
Honor and Awards	Silver Medal in B.Sc (hons) HND		
Memberships	Aridian debating club		
Post Graduate Students	N/A		
Undergraduate Students	N/A		
Honour Students	N/A		
Service Activity	N/A		
Brief Statement of Research Interest	Clinical trial research & survey about emerging novel food ingredients in curative management of chronic diseases.		
Publications	Effect of Raw versus Roasted Fenugreek seed Powder in Reducing Blood Sugar levels in Type-2 Diabetic Patients		
Research grants and Contracts.	N/A		
Other Research or Creative Accomplishments	N/A		
Selected Professional Presentations	N/A		

Performa No-09 Faculty Resume			
Name	Arouj Anwar		
Personal	Department: Biochemistry Date of Appointment: October 21, 2024 Email Address: aroujanwar.1@gmail.com Contact No: 0332-0413982 feel is pertinent.		
Experience	Designation	Institute	No. of Years
	Lecturer	Government Degree College	1 year
	Lecturer	Hamza College of Nursing	1 year
	Research Assistant	COMSAT University	1 year
	Lecturer	Arid Institute of Sciences	Conti...
Honor and Awards	N/A		
Memberships	N/A		
Post Graduate Students	N/A		
Undergraduate Students	N/A		
Honour Students	N/A		
Service Activity	N/A		
Brief Statement of Research Interest	Role of non-coding RNA		
Publications	N/A		
Research grants and Contracts.	N/A		
Other Research or Creative Accomplishments	Role of mRNA in Atherosclerosis		
Selected Professional Presentations	N/A		

Performa 9			
Faculty Resume			
Name	Asifa Batool		
Personal	Department: Computer Science Date of Appointment: March 7, 2024 Email Address: asifabatool223@gmail.com Contact No: 0334-1175120 candidate feel is pertinent.		
Experience	Designation	Institute	No. of Years
	Math Teacher	Garison School	1 year
	Lecturer	Arid Institute of sciences	Till now
Honor and Awards	N/A		
Memberships	Mathematical Conference at QAU		
Post Graduate Students	N/A		
Undergraduate Students	N/A		
Honour Students	N/A		
Service Activity	N/A		
Brief Statement of Research Interest	Inertial Projection-type methods for solving Pseudomonotone VI in (AT10) space.		
Research grants and Contracts.			
Other Research or Creative Accomplishments			
Selected Professional Presentations			