

UNIVERSITY OF THE PUNJAB

NOTIFICATION

It is hereby notified that the Syndicate at its meeting held on 27-07-2023 has approved the recommendations of the Academic Council made at its meeting dated 24-05-2023 regarding approval of the Syllabi and Courses of Reading for 04 years BS Degree in Culinary Arts Management under Semester System for College of Earth and Environmental Sciences as well as affiliated Colleges w.e.f. the Academic Session, 2022 and onward.

The Syllabi and Courses of Reading for 04 years BS in Culinary Arts Management under Semester System is attached herewith as Annexure 'A'.

**Admin. Block,
Quaid-i-Azam Campus,
Lahore.**

Sd/-
REGISTRAR

No. D/ 7667 /Acad.

Dated: 11 – 10 /2023.

Copy of the above is forwarded to the following for information and further necessary action: -

1. Dean, Faculty of Geo Sciences.
2. Principal, College of Earth and Environmental Sciences.
3. Controller of Examinations
4. Director, IT for placement at the website
5. Admin Officer (Statutes)
6. Secretary to the Vice-Chancellor.
7. PS to the Registrar.
8. Assistant Syllabus.



Assistant Registrar (Academic)
for Registrar

**COLLEGE OF EARTH AND ENVIRONMENTAL SCIENCES
UNIVERSITY OF THE PUNJAB, LAHORE.**

COURSES & SYLLABUS

Program Title: 04 YEAR BS Degree in Culinary Arts Management

Department: College of Earth and Environmental Sciences

Faculty: Geoscience

1. Department Mission

The mission of the College is to groom the students into responsible and honest citizens and skilled professionals trained in their respective fields to serve the nation. Character building and moral training is an integral component of student-teacher relationship. Student life in the College provides the students with all possible opportunities to acquire the most dynamic personalities with leadership qualities. Academically excellent and experienced faculty members are involved in teaching and research in the CEES. Classes are regularly held, well supplemented with laboratory work and observations in the field.

2. Introduction

The College of Earth and Environmental Sciences, University of the Punjab, Lahore is presently offering multidisciplinary degree program i.e., BS, MS, M.Phil., and Ph.D. degree programs in the disciplines of Environmental Sciences, Applied Hydrology, Tourism & Hospitality Management, Geomatics and Occupational Health and Safety Management. The purpose of these courses is to produce graduates in these emerging disciplines with the insight and knowledge to serve the nation for attaining environmentally sustainable development in the country

Environmental changes, like desertification, silting of dam reservoirs, water logging, salinity, and contamination of land as well as surface and groundwater, have created problems related to tourism. Over exploitation of resources has adversely impacted the tourism destinations and we are facing the danger of degradation and destruction of ecological infrastructure that is essential for sustainable tourism.

In Pakistan, as elsewhere in developing countries, environmental degradation is occurring due to heavy industrialization concentrated in narrow zones, especially hospitality industry.

Keeping in view the importance and the growing demands for training manpower in the emerging discipline, the College of Earth and Environmental Sciences has been established in the University of the Punjab in 2005. The new building of the College was completed in November 2008, featuring spacious rooms, moderately equipped laboratories, a library, and large grounds.

3. Program Introduction

BS 04 Year Degree in Culinary Arts Management has been designed after extensive feedback from the local and international employers of hospitality and culinary industry and research work on the need and requirement of culinary professionals for the hospitality industry and culinary industry. 'BS Degree in Culinary Arts Management' will be a 04 year program, covering all key areas of the culinary operations and management, leading to an exciting career in the in the hospitality and culinary industry. Completion of the 'BS Degree in Culinary Arts Management' will also offer an entry path to Master / PhD program. The core philosophy of culinary education is to provide management and vocational education and training combined with academic learning and hands-on training.

This qualification leads to employment and self-employment opportunities for the graduates. Since the industry is global and expanding with every passing day, it has twofold employment opportunities; local and international. The program will focus on optimal realization of the potential of students. It will develop and train professionally qualified and competent culinary professionals through a rigorous training process, which will equip the students with soft skills, technical knowledge, positive mental attitude, and work ethics to serve the hospitality and culinary industry internationally.

This program will prepare students for an entry level position at operations and management level in the international hospitality and culinary industry. It covers all elective areas of culinary operations to equip them to get work ready. The curriculum has been designed with a view to imparting the knowledge, skills, and abilities to the students which an employer seeks from a culinary graduate. It also focuses on the practical implications of the cultural diversity while working in the industry in global context.

4. Program Objectives

'BS Degree in Culinary Arts Management' will be a four-year program, covering all key areas of the culinary management and operations, offering a vertical mobility path to 4 years BS program. This qualification leads to employment and self-employment opportunities for the culinary graduates. Since the industry is global and expanding with every passing day, it has twofold employment opportunities; local and international. The program will focus on

optimal realization of the potential of students. It will develop and train professionally qualified and competent culinary professionals through a rigorous training process, which will equip the students with soft skills, technical knowledge, positive mental attitude, and work ethics to serve the industry internationally.

‘Bachelor Degree in Culinary Arts Management’ has been designed after extensive feedback from the local and international employers who are looking for qualified, skilled and competent culinary professionals to address their human resource demands across all segments of the hospitality, culinary, travel and tourism industry. The extensive research work on the human resource need and requirement in the culinary industry unfolds that the demand is on the rise with every passing day.

This program will prepare students for an entry level position in the culinary industry in the international hospitality industry. It covers all key areas of management and culinary operations to equip students with the ability to get them work ready. The curriculum has been designed with a view to imparting the knowledge, skills, and abilities to the students which an employer seeks from a culinary graduate. It also focuses on the practical implications of the cultural diversity while working in the industry in global context.

5. Market Need / Rationale of the Program

The World Tourism Organization (WTO) describes the hospitality, culinary, travel, tourism, and airline industry as the fastest growing industry in the world which is creating millions of new career opportunities around the globe. Approximately 11% workforce of the world is directly linked with this industry. In this context, the demand for culinary professionals is on the rise around the world.

In the wake of China Pak-Economic Corridor (CPEC) project, the hospitality, culinary, travel and tourism industry has received a great impetus for growth and development in Pakistan. It is creating millions of new career opportunities for the qualified, skilled, and competent culinary professionals.

The Expo Dubai is another potent factor for creating huge demand for the culinary professionals in the UAE. Addition of thousands of new rooms in the existing inventory of the hospitality industry is looking for fresh culinary graduates to meet the emerging human resource requirements. Similarly, the FIFA cup in Qatar is a huge opportunity for fresh culinary graduates to fill the upcoming needs of the hospitality industry.

Pakistan has a youth bulge whereby more than 60% youth of its total population is between the age bracket of 15 and 29 years, which indicates immense human resource potential of Pakistan. The hospitality, culinary, travel and tourism industry being dynamic and evolving

with every passing day, it can absorb a huge workforce into its fold. The culinary education and training are the most employment-led in the world. The segments of the industry are diversified with job offerings in hotels, motels, restaurants, fast food chains, cafes, catering companies, clubs, theme parks, cruise ships, airlines etc. etc. The core philosophy of culinary education is to provide management and vocational education and training combined with academic learning and hands-on training.

6. Admission Eligibility Criteria

A student holding HSSC (FA, F.Sc. or I. Com) or equivalent with minimum 2nd division with 12 Years educations marks from any recognized institute of Pakistan. Admissions to BS degree will be on Merit (Marks obtained in previous examination), entry test or interview or the criteria decided by the respective bodies of the university as per rules in vogue.

7. Duration of the Program

Total duration of the program will be 04 year and number of courses taught in BS degree of Culinary Art Management will be 55 with 1-3 credit hours for each course and 15 to 19 credit hours in each semester. There shall be following 4 categories of courses offered to the students according to HEC standardized format/Scheme of studies.

8. Categorization of Courses as per HEC Recommendation and Difference

Semester	Courses	Category (Credit Hours)					Semester Load
		Compulsory	Foundation	Major	General	Elective	
1 st	07	03	01	01	02	--	17
2 nd	07	04	01	02	--	--	19
3 rd	07	02	01	04	--	--	18
4 th	06	02	01	03	--	--	16
5 th	07	02	01	02	02	--	18
6 th	08	02	02	02	02	--	19
7 th	08	01	02	02	01	02	18
8 th	05	01	01	01	--	02	16
PU	55	17	10	07	07	04	141
HEC Guidelines	40-44	09	10	13	07-08	04	124-136
Difference HEC & PU	+11	+08	NIL	+04	NIL	NIL	+05

9. Scheme of Studies / Semester –Wise Workload

Sr. #	Code	Course Title	Course Type	Prerequisite	Credit Hours
Semester I					
1.	HQ-01	Translation of Holy Quran	Compulsory	Intermediate (F.A./F.Sc. I.Com. or equivalent)	Non Credit
2.	CA-101	English I (Functional English)	Compulsory	Intermediate (F.A./F.Sc. I.Com. or equivalent)	03
3.	CA-102	Islamic Studies /Ethics	Compulsory	--	02
4.	CA-103	Basic courses I: Introduction to Hotel Operations	Foundation	--	03
5.	CA-104	Minor Elective I: Principles of Management	General	--	03
6.	CA-105	Minor Elective II: Food and Beverages Management	General	--	02+01
7.	CA-106	Any other I: Introduction to Culinary Arts	Major	--	03
Total Credit hrs Semester-I					17
Semester II					
8.	HQ-02	Translation of Holy Quran	Compulsory	HQ-01	01
9.	CA-107	English II (Communication Skills)	Compulsory	CA-101	03
10.	CA-108	Introduction to Computer	Compulsory	Intermediate (F.A./F.Sc. I.Com. or equivalent)	02+01
11.	CA-109	Mathematics	Compulsory	-do-	03
12.	CA-110	Basic courses II: Food Safety and HACCP	Foundation	CA-105	02+01
13.	CA-111	Any other II: Food Production Management	Major	CA-105	02+01
14.	CA-112	Any other III: Menu Planning and Product Development	Major	CA-106	02+01
Total Credit hrs Semester-II					19
Semester III					
15.	HQ-03	Translation of Holy Quran	Compulsory	HQ-02	Non Credit
16.	CA-201	English III: Technical Writing and Presentation Skills	Compulsory	CA-107	03
17.	CA-202	Basic courses III: Fundamental of Baking	Foundation	CA-111	02+01
18.	CA-203	Any other IV: Supervising Food Safety	Major	CA-110	02+01
19.	CA-204	Any other V: Kitchen Operations and Departmental Management	Major	CA-111	02+01
20.	CA-205	Any other VI: Modern Pakistani Cuisine	Major	CA-111	02+01
21.	CA-206	Any other VII: Project Management	Major	Intermediate (F.A./F.Sc. I.Com. or equivalent)	03
Total Credit hrs Semester-III:					18

Sr. #	Code	Course Title	Course Type	Prerequisite	Credit Hours
Semester IV					
22.	HQ-04	Translation of Holy Quran	Compulsory	HQ-03	01
23.	CA-207	Pakistan Studies	Compulsory	Intermediate (F.A./F.Sc. I.Com. or equivalent)	02
24.	CA-208	Basic courses IV: Food Nutrition & Health	Foundation	CA-203	02+01
25.	CA-209	Any other VIII: Purchasing for Food Service operations	Major	CA-204	03
26.	CA-210	Culinary Art Field Studies-I	Major	CA-206	01
27.	CA-211	Any other IX: INTERNSHIP	Major	CA-206	06
Total Credit hrs Semester-IV					16
Semester V					
28.	HQ-05	Translation of Holy Quran	Compulsory	HQ-04	Non Credit
29.	CA-301	Statistics	Compulsory	CA-109	02+01
30.	CA-302	Gastronomy	General	CA-106	03
31.	CA-303	Food and Beverage Operation and Cost Management	General	CA-104	03
32.	CA-304	Presentation and Visual Effect on Food	Foundation	CA-111	02+01
33.	CA-305	Leadership, Marketing and Entrepreneurship	Major	CA-104	03
34.	CA-306	Art of Garde Manager	Major	CA-106	02+01
Total Credit hrs Semester-V					18
Semester VI					
35.	HQ-06	Translation of Holy Quran	Compulsory	HQ-05	01
36.	CA-307	Western Cuisine	Compulsory	CA-111	02+01
37.	CA-308	Nutrition and Wellness	General	CA-111	03
38.	CA-309	The Art of Butchery	Foundation	CA-112	03
39.	CA-310	Research Methods and Techniques	Foundation	CA-206	03
40.	CA-311	Food formulation	Major	CA-203	03
41.	CA-312	Kitchen Gardening	General	CA-303	02
42.	CA-313	Culinary Arts Field Studies-II	Major	CA-210	01
Total Credit hrs Semester-VI					19

Sr. #	Code	Course Title	Course Type	Prerequisite	Credit Hours
Semester VII					
43.	HQ-07	Translation of Holy Quran	Compulsory	HQ-06	Non Credit
44.	CA-401	Cooking and Catering for Events	General	CA-401	2+1
45.	CA-402	Inventory and Stock Management	Foundation	CA-402	3
46.	CA-403	Team Management and Control	Foundation	CA-403	3
47.	CA-404	International Cuisine and Fusion of Cuisine	Elective	CA-404	2+1
48.	CA-405	Contemporary Confectionary Art of Desserts	Elective	CA-405	2+1
49.	CA-406	Act of Barista and Beverages Management	Major	CA-406	1+1
50.	CA-407	Culinary Arts Field Studies-III	Major	CA-313	1
Total Credit hrs Semester-VII					18
Semester VIII					
51.	HQ-08	Translation of Holy Quran	Compulsory	HQ-07	01
52.	CA-408	Food Waste Management	Elective	CA-402	03
53.	CA-409	Modern Trends and Food Habits	Elective	CA-205	03
54.	CA-410	Food Operations in Modern Technologies	Foundation	CA-404	03
55.	CA-411	Thesis / Viva Voce Examination	Major	CA-206	06
Total Credit hrs Semester-VIII					16
Grand Total (I+II+III+IV+V+VI+VII+VIII):					141

10. Award of Degree

04 Year Bachelor degree in Culinary Arts will be awarded on the successful completion of courses & syllabi and research thesis with minimum required CGPA 2.5/4.00.

11. NOC from Professional Councils (if applicable)

Not Applicable

12. Faculty Strength

Degree	Area / Specialization	Total
PhD	<ol style="list-style-type: none">1. Prof. Dr. Sajid Rashid Ahmad2. Prof. Dr. Irfan Ahmad Shaikh3. Prof. Dr. Nadia Jamil4. Dr. Abdul Qadir5. Dr. Yumna Sadeef6. Dr. Muhammad Kamran7. Dr. Muzaffar Majid Ch.8. Dr. Azhar Ali9. Dr. Sana Ashraf10. Dr. Muhammad Bilal Shakoor11. Dr. Naeem Akhtar Abbasi12. Dr. Mehwish Mumtaz13. Dr. Muhammad Awais14. Dr. Rizwan Aziz15. Dr. Muhammad Asif Javed	15
MS / M.Phil.	<ol style="list-style-type: none">16. Mr. Muhammad Waqar17. Ms. Anum Tariq18. Mr. Muhammad Dastgeer19. Ms. Zahra Majid	04

13. Present Student Teacher Ration in the Department

447: 19= (1:23)

14. Course Outlines Separately for Each Course

1ST YEAR, FIRST SEMESTER			
Code	Course Title	C.H.	Course Type
HQ-01	Translation of Holy Quran	Non Credit	Compulsory
CA-101	English I (Functional English)	03	Compulsory
CA-102	Islamic Studies / Ethics	02	Compulsory
CA-103	Basic courses I: Introduction to Hotel Operations	03	Foundation
CA-104	Minor Any other I: Principles of Management	03	General
CA-105	Minor Any other II: Food and Beverages Management	02+01	General
CA-106	Any other I: Introduction to Culinary Art	03	Major
Total Credit hrs Semester-I		17	

PRE-REQUISITE: F.Sc. or equivalent**COURSE OUTLINE**

سورة الفاتحة تا سورة آل عمران

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

On the successful completion of the course candidates will be able to:

- Construct sentences using correct grammar.
- Write meaningful essays, précis, and comprehend written English.
- Exhibit sound vocabulary and skills to use English in professional life.
- Communicate in written and oral English with peers and teachers.
- Rely less on their first languages and increase their use of English in formal and informal situations.
- Deep understanding of correct English structures in descriptive, narrative, and instructional texts.

CONTENTS

Course Introduction & Objectives:

This course provides individualized and small group instruction in basic reading and writing skills. The course focuses on basic coursesal phonics skills, functional vocabulary, and comprehension, as well as writing personal information, creating lists and basic computer skills. The course will ensure that candidates will communicate effectively in English language.

Module -1 Fundamentals of Grammar

- Parts of speech and their correct usage, sentence structure and types of sentences.
- Parts of speech & their correct usage, Sentence Structure, and types of sentences.
- Spelling, vocabulary. Listening skills, speaking skills, writing skills.

Module -2 Message Design

- Process of preparing effective business message.
- The appearance and design of business message
- Good-news and neutral messages.

Module -3 Strategies for Oral Communication.

- Strategies for successful speaking and successful listening.
- Strategies for successful informative and persuasive speaking.

Module -4 The Job Application Process.

- The written job presentation
- The job application process-interviews and follow-up.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
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- Short Tests, Quizzes etc.

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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Banks, D. (2019). A systemic functional grammar of English: A simple introduction. Routledge.
2. Coffin, C., Donohue, J., & North, S. (2013). Exploring English grammar: From formal to functional. Routledge.
3. Thompson, G. (2013). Introducing functional grammar. Routledge.
4. Fontaine, L. (2012). Analyzing English grammar: A systemic functional introduction. Cambridge University Press.
5. Lock, G. (1996). Functional English grammar: An introduction for second language teachers. Cambridge University Press.

PRE-REQUISITE

Intermediate: F. A/F.Sc. / I. Com or equivalent

LEARNING OUTCOMES

Following are the learning outcomes of the course:

- Learning on the basic concepts and principles of Islam
- Learning of concepts of Holy Quran & Uloom ul Quran
- Learning of concepts of life of Holy Prophet (PBUH)
- Learning of ethics of Hospitality in Islam

CONTENTS**A. ISLAMIC STUDIES****Introduction:**

This course is designed to provide the students with basic concepts and principles of Islam. The course also focuses on the life of Muhammad (S.A.W) and makes an introduction of tourism and hospitality reference to Islamic teachings.

Module -1 Introduction to Quranic Studies:

- Basic concepts of Quran, History of Quran, Uloom-ul-Quran
- Verses of Surah Al-Baqarah related to Faith (verse No. 284-286)
- Verses of Surah Al- Hujrat related to Adab Al -Nabi (verse No:1-18)
- Verses of Surah Al- Ihzab related to Adab Al -Nabi (verse No:6, 21, 40,56,57,58)
- Verses of surah Al-Mumanoon related to characteristics of faithful (verse No: 1-11)
- Verse Surah al-Furqan related to social ethics (verse No: 63-77)
- Verses of surah Al-inam related to Ihkam (verse No:152-154)
- Verses of surah Al-saf related to tafakar, tadabar (verse No; 1-14)

Module -2 Basic Concepts of Hadith:

- History of Hadith
- Kinds of Hadith
- Uloomul Hadith
- Legal position of Sunnah

Module -3 Life of Prophet Muhammad (P.B.U.H.):

- Life of Muhammad bin Abdullah (before prophethood)
- Life of the Holy prophet (S.A.W) in Makkah
- Life of the prophet in (S.A.W) in Madina
- Basic concepts of Islamic political system
- Islamic concept of sovereignty
- Basic institutions of Government in Islam

Module -4 Tourism & Hospitality and Islamic Concepts:

- Ethics of hospitality in Islam
- Ethics of food and beverages in Islam
- Ethics of Travel and travelers in Islam

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS / SUGGESTED READINGS

1. Allain, J. (2016). MA Gazi (ed.), the Shorter Book of Muslim International Law. Jus Gentium: J. Int'l Legal Hist., 1, 183.
2. Muborakshoeva, M. (2012). Islam and Higher Education: Concepts, challenges, and opportunities. Routledge.
3. Ḥassān, Ḥ. Ḥ., & Ḥassān, Ḥ. Ḥ. (2010). An Introduction to the study of Islamic Law. Adam Publishers.
4. An-Na'im Na, A. A. (2009). Islam and the secular state. Harvard University Press.
5. Waliullah, M. (2006). Muslim Jurisprudence and the Qur'anic Law of Crimes. Adam Pub.
6. Kelsay, J. (2007). Arguing the just war in Islam. Harvard University Press.
7. Kennedy-Day, K. (2003). Books of definition in Islamic philosophy: The limits of words. Routledge.

CA-103: INTRODUCTION TO HOTEL OPERATIONS (03 Credit Hrs)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

At the completion of this course, students should be able to

- Identify the Minor Elective classifications of hotels and describe the most distinctive features of each.
- List the common divisions or functional areas of hotel organization (rooms, food and beverage, engineering, marketing and sales, accounting, human resources, and security), and explain the responsibilities and activities of each.
- List and explain the elective classifications of food services, beginning with the distinction between commercial and institutional operations.
- Analyze the importance of each division in achieving the objectives of a lodging and/or food service operation.
- Demonstrate knowledge of food and beverage controls that pertain to food and beverage sales, payroll planning, and production standards.
- Describe ways in which technological advancements, such as property management systems, Internet access provided to guests, and reservations made through online booking sources, have dramatically

CONTENTS

This course lays the groundwork for a basic understanding of the lodging and food service industry by tracing the industry's growth and development both nationally and internationally, by reviewing the organization of hotel and food and beverage operations, and by focusing on industry opportunities and future trends.

Module -1

- Minor Elective classifications of hotels.
- Common divisions or functional areas of hotel organization (rooms, food and beverage, engineering, marketing and sales, accounting, human resources, and security)

Module -2

- Functional areas or departments typically found in each hotel division.
- Elective classifications of food services, beginning with the distinction between operations, organization, structure, and functional areas in commercial and institutional food service operations.

Module -3

- Importance of each division in achieving the objectives of a lodging and/or food service operation.
- Food and beverage controls that pertain to food and beverage sales, payroll planning, and production standards.

Module -4

- Benefits of and advancements in energy management programs and outline steps for organizing such a program.

- Technological advancements, such as property management systems, Internet access provided to guests, and reservations made through online booking sources, have dramatically.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Smart, K., Ma, E., Qu, H., & Ding, L. (2021). COVID-19 impacts, coping strategies, and management reflection: A lodging industry case. *International Journal of Hospitality Management*, 94, 102859.
2. Szende, P., Dalton, A. N., & Yoo, M. M. (2021). *Operations Management in the Hospitality Industry*.
3. Arya, R., & Delmas, A. (2021). *Business Plan Annapurna: A food service availability in housing complexes in India*.
4. Mathews, A., Patten, E. V., & Stokes, N. (2021). Foodservice Management Educators' Perspectives on Nutrition and Menu Planning in Student-Operated Restaurants. *Journal of Nutrition Education and Behavior*, 53(3), 223-231.
5. Hayes, D. K., Ninemeier, J. D., & Miller, A. A. (2017). *Hotel operations management*. Upper Saddle River, NJ: Pearson.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Discuss and communicate the management evolution and how it will affect future managers.
- Observe and evaluate the influence of historical forces on the current practice of management.
- Identify and evaluate social responsibility and ethical issues involved in business situations and logically articulate own position on such issues.
- Explain how organizations adapt to an uncertain environment and identify techniques managers use to influence and control the internal environment.
- Practice the process of management's four functions: planning, organizing, leading, and controlling.
- Evaluate leadership styles to anticipate the consequences of each leadership style.

CONTENTS

Examination of management theory and provide opportunities for application of these ideas in real world situations. This examination focuses on the managerial functions of Assessing, Planning, Organizing, and Controlling. Both traditional and cutting-edge approaches are introduced and applied. Specific attention is paid throughout the course to the ethical implications of managerial action and inaction.

Module -1 Introduction to Management and Basic courses of Management:

- Management, Functions, and Skills of management.
- Management types, like Historical forces shaping management, Classical management – Scientific Management- Bureaucratic Management – Administrative principles, Humanistic Perspective –Human Relations Movement – The Human Resource Perspective – The Behavioral Science Approach, Ethics

Module -2 Goal Setting & Planning:

- Goals, Planning, Types of planning, Time Horizon.
- Strategy, Strategic management, SWOT, Types of Strategies.
- Formulation to Implementation, decision making, types of decision making, Steps in decision making.
- Organizing, Types of organizations, Departmentalization, Division of labor.

Module -3 Leading:

- Nature of leadership, Leadership verses Management.
- Position power, Personal power, Empowerment, Behavioral approach, Contingency Approach, New Leadership Approach.

Module -4 Controlling:

- Importance of Control, Planning & Controlling, and Organization control focus.
- TQM, Elements of organization control, Management control system, Financial Control, Budgeting process, Trends in financial control.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Morden, T. (2017). Principles of management. Routledge.
2. Koontz, H. (2010). Essentials of management. Tata McGraw-Hill Education.
3. Robbins, S. P., Coulter, M., & Vohra, N. (2009). Introduction to Management and Organizations. Management 10th Edition. Pearson Education: Publishing Prentice Hall Publications, 2-21.
4. Barth, S. C., & Hayes, D. K. (2006). Hospitality law: managing legal issues in the hospitality industry. John Wiley & Sons.
5. Bateman, T. S., & Snell, S. (2002). Management: Competing in the new era. Irwin Professional Publishing.

CA-105: FOOD AND BEVERAGES MANAGEMENT (THEORY) (02 Credit hrs)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES

Upon completion of this course the students will be able to:

1. Demonstrate an understanding of food and beverage management and its impacts on the various areas within hospitality organizations.
2. Demonstrate an understanding of the internal and external factors that affect any business or hospitality organization.
3. Demonstrate an understanding to different ways to service the beverages.
4. Demonstrate the handling of knife in the kitchen
5. Demonstrate the various ways to cut vegetables.
6. Demonstrate an understanding the various ways of service

COURSE INTRODUCTION AND OBJECTIVES

This is a senior level course designed to provide complete understanding of Food and beverage in the hospitality industry.

Module-1 Introduction

- Introduction of Food and Beverage department, Overview of F&B in different hotels, Organizational structure,

Module-2 Services

- Complete service protocol, Service ethics, Types of restaurant, Handling difficult situation in restaurant,

Module-3 Menu

- Menu planning, design and price control, Knowledge about alcoholic and non-alcoholic beverages, Hotel room service complete knowledge, Food menus and beverage list

Module-4 Record Keeping

- An overview of Food and beverage control, financial aspects in F&B, Receiving, Storing and issuing, Beverage controlling, Control and keeping methods of inventory, Food and Beverage service methods

Module-5 Restaurant Management

- Food and beverage management in fast food and popular caterers, Consideration of opening a new outlet, Turnover ratio in a restaurant,

Module-6 Sales and Marketing

- Sales and marketing in food and beverage department, Managing quality in food and beverage operations,

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Bali, P. S. (2021). Food Production Operations (2nd Revised edition). OXFORD UNIVERSITY PRESS.
2. Ninemeier, J. D. N. (2018). Planning and Control for Food and Beverage Operations, (9th ed.). American Hotel & Lodging Association, Educational Institute.
3. Cichy, R. F. C., & Hickey, P. J. H. (2017). Managing Service in Food and Beverage Operations (5th ed.). American Hotel & Lodging Association, Educational Institute.
4. Singh, N. M. (2016). Training Manual for Food and Beverage Services (Vol. 1). I.K. International Publishing House Pvt Ltd.
5. Ninemeier, J. D. N. (2015). Management of Food and Beverage Operations, (6th ed.). American Hotel & Lodging Association, Educational Institute.
6. Andrews, S. (2013). Food and beverage service: A training manual. Tata McGraw-Hill Education.
7. D'Souza, E. (2012). Food and Beverage: A Practical Guide.
8. Ojugo, C. (2010). Practical food and beverage cost control. Cengage Learning.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES

Upon completion of this course the students will be able to:

1. Demonstrate an understanding of food and beverage management and its impacts on the various areas within hospitality organizations.
2. Demonstrate an understanding of the internal and external factors that affect any business or hospitality organization.
3. Demonstrate an understanding to different ways to service the beverages.
4. Demonstrate the handling of knife in the kitchen
5. Demonstrate the various ways to cut vegetables.
6. Demonstrate an understanding the various ways of service

CONTENTS

Introduction to Food and Beverage equipment, Overview of F&B structure in different hotels, Practical of Complete service protocol, Practice Service ethics, Menu presentation, Hotel room service complete practice, Quality in food and beverage operations, Practice of Food, and beverage control, Storing and issuing procedure, Inventory controlling, how to cut vegetables, how to work in hot, cold, and pastry part of a kitchen, Practicing of dining room services, Safety measures in kitchen. Presentation and practical test.

Module -1 Introduction

- Introduction of Food and Beverage department.
- Overview of F&B in different hotels, Organizational structure.
- Complete service protocol, Service ethics.
- Types of restaurants, Handling difficult situation in restaurant.

Module -2 Menu

- Menu planning, design, and price control.
- Knowledge about alcoholic and non-alcoholic beverages.
- Hotel room service complete knowledge, Food menus and beverage list.

Module -3 Record Keeping

- Overview of Food and beverage control, financial aspects in F&B.
- Receiving, Storing, and issuing, Beverage controlling.
- Control and keeping methods of inventory, Food and Beverage service methods.

Module-4 Restaurant Management

- Food and beverage management in fast food and popular caterers.
- Consideration of opening a new outlet, Turnover ratio in a restaurant.
- Sales and marketing in food and beverage department, Managing quality in food and beverage operations.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS & SUGGESTED READINGS:

1. Davis, B., Lockwood, A., Alcott, P., & Pantelidis, I. S. (2018). Food and beverage management. Routledge.
2. Cousins, J., Lillicrap, D., & Weekes, S. (2014). Food and beverage service. Hachette UK.
3. Theng Loo, P. (2012). Food and beverage management for the hospitality, tourism, and event industries.
4. Miller, J. E., Hayes, D. K., & Dopson, L. R. (2002). Food and beverage cost control. Wiley.
5. Lillicrap, D. R., Cousins, J. A., & Smith, R. (1971). Food and beverage service. Edward Arnold.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- To apply the latest modes of working, to master the various existing culinary techniques in national and international cookery, as well as in traditional and contemporary cuisine.
- To estimate, manage resources, and calculate costs, taking into consideration all necessary factors, from purchasing of basic resources, working with suppliers through to the final product, making use of strategic, administrative, and marketing concepts.
- To be able to manage a working team, making the best of their potential and supervising the activities of kitchen aids and auxiliaries, acquiring the necessary competence to solve different problems which may arise in work, as well as the efficient use of time, space, and human and material resources within the kitchen.
- To plan and carry out efficient leadership for the best preparation and elaboration of foods, always observing the safety and hygiene regulations in the workplace and following the instructions of a qualified professional.
- To acquire the knowledge which will allow you to conserve and handle different food resources, and to design and produce menus to meet the quality standards of each area of the market.

CONTENTS:

Food is fundamental to life. Not only does it feed our bodies, but it is often the centerpiece for family gatherings and social functions. In this course, students learn all about food, including food culture, food history, food safety, and current food trends. They also learn about the food service industry and prepare some culinary dishes. Through hands-on activities and in-depth study of the culinary arts field, this course helps students to enhance their cooking skills and gives them the opportunity to explore careers in the food industry.

Module -1 Introduction:

- Aims & Objectives of cooking food, maintain personal hygiene, hazards & Risks.
- History & development of cooking, the kitchen brigade, food, and nutrition's.
- Health & Safety regulations, hazards in workplace, communication skills, security procedures, teamwork, waste management, pest control, storage, and stock control.

Module -2 Introduction to Hygiene and Sanitation:

- Hygiene, Sanitation, meaning, uses in hotel industry.
- Importance of hygiene and sanitation in catering industry.
- Personal hygiene for staff members in the production areas & for staff coming in touch with guests.
- Raising agents - Flavoring and Seasonings, sweetening agents, Thickening agents. Knife and Knife skills, kitchen terminologies.

Module -3 Preparation concepts:

- Preparation of Ingredients – Washing, peeling, Scrapping, cutting of vegetables.
- Method of mixing foods, methods of cooking foods.
- Sauce meaning, uses, points to be observed when preparing recipe for mother sauces, Names, and derivatives of mother sauce.

Module -4 Menu concepts:

- Menu & types of menus, Basic Stock types, Soups and its types, Rice & types of rice, Egg dishes, pasta & cooking methods of pasta, Fish course, Poultry, key preparation techniques of poultry, Introduction to vegetables & cooking techniques.
- Horrs d' Oeuvers, appetizers and starters, salads, cold sauces, Introduction to desserts. (Preparation of 6 recipes from each course)

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Gleason, J. (2014). Introduction to Culinary Arts. Pearson Higher Ed.
2. Heller, M. (2007). The DASH Diet Action Plan: Proven to Lower Blood Pressure and Cholesterol without Medication. Amidon Press.
3. Bartholomew, S. C. (2006). The influence of gender, age, and locus of control on servant leader behavior among group leaders at the Culinary Institute of America. Walden University.
4. Brown, D. R. (2003). The restaurant manager's handbook: How to set up, operate, and manage a financially successful food service operation (Vol. 1). Atlantic Publishing Company.
5. Ryan, L. T. (2003). The culinary institute of America: A history. University of Pennsylvania.

FIRST YEAR, SECOND SEMESTER			
Code	Course Title	C.H.	Course Type
HQ-02	Translation of Holy Quran	01	Compulsory
CA-107	English II (Communication Skills)	03	Compulsory
CA-108	Introduction to Computer	02+01	Compulsory
CA-109	Mathematics	03	Compulsory
CA-110	Basic courses II: Pakistan – Food Safety and HACCP	02+01	Foundation
CA-111	Any other II: Tourism: Planning and Managing Food Production	02+01	Major
CA-112	Elective III: Menu Planning and Product Development	02+01	Major
Total Credit hrs Semester-II		18	

PRE-REQUISITE: HQ-01**COURSE OUTLINE**

سورة النساء سورة الانعام

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES

- Understand and apply knowledge of human communication and language processes as they occur across various contexts.
- Understand and evaluate key theoretical approaches used in the interdisciplinary field of communication.
- Understand the research methods associated with the study of human communication and apply at least one of those approaches to the analysis and evaluation of human communication.
- Find, use, and evaluate primary academic writing associated with the communication discipline.
- Develop knowledge, skills, and judgment around human communication that facilitate their ability to work collaboratively with others
- Communicate effectively orally and in writing.

CONTENTS

This course aims to enable students to communicate clearly and with impact, by improving their verbal and non-verbal communication style, as well as enhancing interpersonal skills. Communicating effectively will soon seem effortless.

Module -1 Theory:

- Elements of effective language
- Correct use of words & expression
- Treacherous words; Translation from Urdu to English & Vice Versa

Module -2 Practical:

- Comprehension and translation exercises.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Cenere, P., Gill, R., Lawson, C., & Lewis, M. (2015). Communication Skills for Business Professionals 7. Cambridge University Press.
2. Thill, J. V., Bovée, C. L., & Cross, A. (2013). Excellence in business communication, New York: Pearson.
3. Murphy, H. A., Hildebrandt, H. W., & Thomas, J. P. (1997). Effective business communications.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

Upon completion of this course, students will:

- Be able to identify computer hardware and peripheral devices
- Be familiar with software applications & file management
- Accomplish creating basic documents, worksheets, presentations, and databases
- Distinguish the advantages and disadvantages of networks
- Experience working with email and recognize email netiquette
- Explore the Web and how to conduct research

CONTENTS

This course is designed to familiarize students with computers and their applications. It will also emphasize the use of computers and technology throughout their high school, college, and future careers. Students will learn fundamental concepts of computer hardware and software and become familiar with a variety of computer applications, including word processing, spreadsheets, databases, and multimedia presentations. Students will also investigate Internet-based applications, working with email and learning how to browse the web. Coursework also includes activities that explore social and ethical issues related to computers.

Module -1 Introduction to computer:

- Definition, types and classification of computers, Hardware, Input hardware, storage hardware.
- Different types of Microprocessors & other Hardware Terminology.
- Overall windows operation, Introduction to different windows-based packages, Utilities / Application of MS-Word, Application of MS- Excel.

Module -2 Useful Program:

- Adobe Photoshop. Editing photographs/Advertisement designing.
- Coral Draw. Layout and drawing.
- Macromedia Flash. Animation making/Drawing cartoons for newspapers and magazines. Graphics.
- Use of scanners.

Module -3 Computer Application (Practical):

- Familiarize with a PC and identify the various components of a computer.
- Identify the various Input and Output Devices.
- Introduction to Basic DOS commands.
- Getting familiar to Windows Environment.
- Introduction to the various packages of MS-Office.
- Introduction to the Word Processor.
- MS-Word: Entering a document, Editing a Text. Inserting, replacing, and deleting Characters. Saving a document. Opening an Existing Document and changing Page Layout.
- Utilities / Application of MS-Word
- Application of MS- Excel

Module -4 Advance applications for Tourism & Hospitality:

Property management system interfaces

- Point of sale systems (pos)
- Cash accounting systems (cas), guest information systems Food & beverage management applications
- Recipe management / sales analysis Food and beverage applications
- Pos order – entry units
- Keyboards and monitors, touch screen terminals
- Pos software Accounts applications
- Accounts receivable module
- Payroll module inventory module

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Page, R., & Gamboa, R. (2018). Essential Logic for Computer Science. MIT Press.
2. Richard G., (2000), “Computer Simulate with Mathematics” and Spring-Verlag. Germany.
3. Long L., Long N., (2000). Fundamentals of Computer, 6th Ed.

CA-108: INTRODUCTION TO COMPUTER (PRACTICAL) (01 Credit hr)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

Upon completion of this course, students will:

1. Be able to identify computer hardware and peripheral devices
2. Be familiar with software applications
3. Understand file management
4. Accomplish creating basic documents, worksheets, presentations and databases
5. Distinguish the advantages and disadvantages of networks
6. Experience working with email and recognize email netiquette
7. Explore the Web and how to conduct research
8. Identify computer risks and safety

CONTENTS

This course is designed to familiarize students with computers and their applications. It will also emphasize the use of computers and technology throughout their high school, college, and future careers.

Module-1 Computer Application

- Familiarize with a PC and identify the various components of a Computer.
- Identify the various Input and Output Devices.
- Introduction to Basic DOS commands.
- Introduction to Windows as an Operating System.
- Getting familiar to Windows Environment.
- Introduction to the various packages of MS-Office.
- Introduction to the Word Processor.
- MS-Word: Entering a document, Editing a Text. Inserting, replacing and deleting Characters. Saving a document. Opening an Existing Document, and changing Page Layout.
- Utilities / Application of MS-Word
- Application of MS- Excel

Module-2 Advance applications for Tourism & Hospitality

Property management system interfaces

- Point of sale systems (pos)
- Cash accounting systems (cas), guest information systems Food & beverage management applications
- Recipe management / sales analysis Food and beverage applications
- Pos order – entry units
- Key boards and monitors , touch screen terminals
- Pos software Accounts applications
- Accounts receivable module
- Payroll module inventory module

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS/ SUGGESTED READINGS:

1. Thomas, C., Fraga-Lamas, P., & Fernández-Caramés, T. M. (Eds.). (2020). *Computer Security Threats*. BoD–Books on Demand.
2. Bakare, J., & Orji, C. T. (2019). Effects of reciprocal peer tutoring and direct learning environment on sophomores' academic achievement in electronic and computer fundamentals. *Education and Information Technologies*.
3. Page, R., & Gamboa, R. (2018). *Essential Logic for Computer Science*. MIT Press.
4. Richard G., (2000), "Computer Simulate with Mathematics" and Spring-Verlag. Germany.
5. Long L., Long N., (2000). *Fundamentals of Computer*, 6th Ed.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Use concepts and apply techniques to the solution of problems in algebra and modeling, measurement, financial mathematics, data and statistics, and probability.
- Use mathematical skills and techniques, aided by appropriate technology.
- To organize information and interpret practical situations.
- Interpret and communicate mathematics in a variety of written and verbal forms, including diagrams and statistical graphs.

CONTENTS

This course is designed to promote the development of knowledge, skills and understanding in areas of mathematics that have direct application to the broad range of human activity. Students will learn to use a range of techniques and tools, to develop solutions to a wide variety of problems relating to their present and future needs and aspirations.

Module -1 Whole Numbers:

- Reading and writing whole numbers, addition & subtraction of whole numbers, multiplication & division of whole numbers, long division, rounding whole numbers, roots, and order of operations, Solving application problems.
- Reading and writing decimal, rounding decimals, adding decimals, subtracting decimals, multiplying decimals, dividing decimals, writing fractions as decimals.

Module -2 Multiplying and Dividing Fractions:

- Basics of fractions, mixed numbers, factors, multiplication of fractions, applications of multiplication, dividing fractions, multiplication, and division of mixed numbers.
- Adding and subtracting like fractions, least common multiples, adding and subtracting unlike fractions, adding, and subtracting mixed numbers, order relations and the order of operations.

Module -3 Ratio, Proportion and Percent:

- Ratios, rates, proportions, and applications of proportions. Basics of percent, percent and fractions, the percent proportion, Identifying the parts in a percent problem, using proportions to solve percent problems.
- The English system, The metric system—length, The metric system--capacity and weight (mass), Applications of metric measurement, metric-English conversions, and temperature.

Module -4 Geometry & Algebra:

- Basic geometric terms, angles and their relationships, Rectangles and squares, Parallelograms and trapezoids, triangles, circles, volume, Pythagorean theorem, similar triangles.
- Signed numbers, addition and subtraction of signed numbers, order of operations, evaluating expressions and formulas, solving equations, solving equations with several steps, applications.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Anton, H. (1989). Calculus with Analytical Geometry: Late Trigonometry Version.
2. Salzman, S. A., Miller, C. D., & Clendenen, G. (1990). Mathematics for business. Scott, Foresman.Hassett, B., McKernan, J., Starr, J., & Vakil, R. (Eds.). (2013). A Celebration of Algebraic Geometry (Vol. 18). American Mathematical Soc.
3. Garrity, T. A. (2002). All the Mathematics you missed: but need to know for Graduate School. Cambridge University Press.
4. Lang, S. (2013). Complex analysis (Vol. 103). Springer Science & Business Media.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

On completion of the course the students will be able to:

- To provide a comprehensive overview of the application of HACCP principles for the development of HACCP based systems within food businesses.
- To examine the role of good hygiene practices as a basic courses for HACCP based food safety management systems
- To consider the design and management requirements associated with the application of HACCP based food safety management systems in food businesses.
- To enhance the skills required for the assessment of HACCP based food safety management systems.
- Evaluate hazards and critical control points to create a HACCP plan

CONTENTS:

This course aims to develop the skills required for promoting and advising on the use of HACCP based food safety management systems, for assessing the integrity and effectiveness of such systems and actions to be considered where audit identifies deficiencies or failures in the food safety management system.

Module -1 Introduction

- Background and status of HACCP, basics of food safety using the HACCP system.
- Presenting the core knowledge, skills, and abilities that retail foodservice employees need to prevent accidental or deliberate food contamination.

Module -2 HACCP system

- Structure and preventive approach to design a food safety management system.
- Principles of HACCP, Benefits, and limitations of HACCP.

Module -3 Hazard analysis

- Systematic and detailed approach to Hazard analysis.
- HACCP structure & documentation format, Preparation, implementation of HACCP Plan.

Module -4 Scope of HACCP

- Purpose and scope of assessing HACCP within food industry, food safety and food defense.
- Standard operating procedures, verification and keeping records of HACCP activities.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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2.	Formative Assessment	25%	It is continuous assessment. It includes classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS & SUGGESTED READINGS

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2. Barach, J. T. (2016). FSMA and food safety systems: Understanding and implementing the rules. John Wiley & Sons.
3. Paster, T. (2007). The HACCP food safety employee manual. John Wiley & Sons.
4. Arduser, L., & Brown, D. R. (2005). HACCP and Sanitation in Restaurants and Food Service Operations. Atlantic Publishing Company.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

On completion of the course the students will be able to:

- To provide a comprehensive overview of the application of HACCP principles for the development of HACCP based systems within food businesses.
- To examine the role of good hygiene practices as a basic courses for HACCP based food safety management systems
- To consider the design and management requirements associated with the application of HACCP based food safety management systems in food businesses.
- To enhance the skills required for the assessment of HACCP based food safety management systems.
- Evaluate hazards and critical control points to create a HACCP plan

CONTENTS:

This course aims to develop the skills required for promoting and advising on the use of HACCP based food safety management systems, for assessing the integrity and effectiveness of such systems and actions to be considered where audit identifies deficiencies or failures in the food safety management system.

Module -1 Hazard Identification

- Biological, chemical, physical, radiological allergens

Module -2 Hazard analysis

- Systematic and detailed approach to Hazard analysis.
- HACCP structure & documentation format, Preparation, implementation of HACCP Plan.

Module -3 Preventive Control

- Allergens control, supply chain control and sanitation control

Module -4 Record Keeping

- Monitoring and writing corrective action plan

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

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4. Arduser, L., & Brown, D. R. (2005). HACCP and Sanitation in Restaurants and Food Service Operations. Atlantic Publishing Company.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Maintain personal health and hygiene and to help maintain a hygienic, safe, and secure workplace.
- Plan and organize own work effectively with teammembers & develop own skills.
- Prepare, cook, and hold food safely to produce basic fish dishes, meat dishes, poultry dishes, vegetable dishes.
- Produce basic bread, dough products, pastry products, cakes, sponges, and scones.

CONTENTS:

The objective of this course is to support a role in the workplace. This course is suitable for learners employed in hospitality roles wishing to develop their skills in food production management. These may be chefs, kitchen assistants/porters or fast-food assistants. It is mainly concerned with those who deal with cooking or reheating food that required little or no preparation. This qualification covers a variety of topics including the importance of teamwork, safe and hygienic workplaces, and food safety as well as how to prepare basic food dishes. These are all key areas within the hospitality sector and for those working in the kitchen environment. It forms the competency element of the Food Production management pathway of the Intermediate Catering and Professional Chefs Apprenticeship and can also be taken on a stand alone basis.

Module -1 Maintenance of a Safe, Hygienic:

- State own responsibilities under the Health & Safety at Work Act.
- State Minor Elective rules on hygiene that must be followed, State correct clothing, footwear and head gear that should be always worn.
- State the importance of maintaining good personal hygiene, describe how to deal with cuts, grazes, and wounds and why it is important to do so.

Module -2 Secure Working Environment:

- State the importance of working in a healthy, safe, and hygienic way, Health and Safety in your workplace can be obtained.
- State accidents and near accidents should be reported and describe the type of emergencies that may happen in workplace and how to deal with them.
- State where to find first aid equipment and who the registered first-aider is in the workplace. State safe lifting and handling techniques that should be followed.

Module -3 Prepare, cook, and hold food safely:

- State why it is necessary to defrost foods before cooking, when it is necessary to defrost foods before cooking.
- Describe to recognize conditions leading to safety hazards, what to do if any food safety hazards are discovered, State the importance of knowing that certain foods cause allergic reactions.
- Describe the relevant nutritional standards used within school meals, the main nutrient groups, what quantity of nutrients are typically needed to maintain a good dietary balance.
- Describe what food preparation and cooking methods can affect the nutritional content of foods, State the importance of knowing calorific values per portion.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Belitz, H. D., Grosch, W., & Schieberle, P. (2009). Cereals and cereal products. Food chemistry, 670-745.
2. Ruffin, F. E. (2008). Kitchen Smarts: Food Safety and Kitchen Equipment. The Rosen Publishing Group, Inc.
3. Hallam, E. (2004). Food Technology. Nelson Thornes.
4. Brown, D. R. (2003). The restaurant manager's handbook: How to set up, operate, and manage a financially successful food service operation (Vol. 1). Atlantic Publishing Company.
5. James, K. (2002). Escoffier: The king of chefs. A&C Black.
6. Barham, P. (2001). The science of cooking. Springer-Verlag GmbH
7. Child, J. (1983). Mastering the art of French cooking (Vol. 2). Mastering the Art of French Company.

CA-111: FOOD PRODUCTION MANAGEMENT(PRACTICAL) (01Credit hr)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Maintain personal health and hygiene and to help maintain a hygienic, safe, and secure workplace.
- Plan and organize own work effectively with teammembers & develop own skills.
- Prepare, cook, and hold food safely to produce basic fish dishes, meat dishes, poultry dishes, vegetable dishes.
- Produce basic bread, dough products, pastry products, cakes, sponges, and scones.

CONTENTS:

The objective of this course is to support a role in the workplace. This course is suitable for learners employed in hospitality roles wishing to develop their skills in food production management. These may be chefs, kitchen assistants/porters or fast-food assistants. It is mainly concerned with those who deal with cooking or reheating food that required little or no preparation. This qualification covers a variety of topics including the importance of teamwork, safe and hygienic workplaces, and food safety as well as how to prepare basic food dishes. These are all key areas within the hospitality sector and for those working in the kitchen environment. It forms the competency element of the Food Production management pathway of the Intermediate Catering and Professional Chefs Apprenticeship and can also be taken on a stand alone basis.

Module -1 Modify the content of dishes:

- Describe about food preparation and cooking methods can affect the dietary content of foods, modifying and fortifying food can add or remove vital nutrients.
- State why dishes should be stored at temperature before cooking, State why dishes not for immediate consumption should be cooled rapidly or maintained at a safe temperature after cooking.
- State whether the dish ingredients contain genetically modified organisms (GMOs) and what the organizational policy is on using GMOs.
- Produce Basic Fish Dishes, Produce Basic Meat Dishes, Produce Basic Poultry Dishes, Produce Basic Vegetable Dishes, Cook-Chill Food, Cook-Freeze Food, Produce Basic Hot Sauces, Produce Basic Rice, Pulse and Grain Dishes, Produce Basic Pasta Dishes, Produce Basic Bread and Dough Products, Produce Basic Pastry Products, Produce Basic Hot and Cold Desserts, Produce Basic Cakes, Sponges and Scones, Produce Cold Starters and Salads, Produce Flour, Dough and Tray Baked Products.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
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- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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2. Ruffin, F. E. (2008). Kitchen Smarts: Food Safety and Kitchen Equipment. The Rosen Publishing Group, Inc.
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5. James, K. (2002). Escoffier: The king of chefs. A&C Black.
6. Barham, P. (2001). The science of cooking. Springer-Verlag GmbH
7. Child, J. (1983). Mastering the art of French cooking (Vol. 2). Mastering the Art of French Company.

CA-112 MENU PLANNING & PRODUCT DEVELOPMENT (THEORY) (02 Credit hrs)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Different types of menus for different service styles & the principles of menu design
- Describe the factors that should be considered in the planning of different types of menus
- Describe the minimum information that should be contained on a written menu
- Recipes and menus for meal occasions/themes, and nutritional dietary requirements, different function sizes, for budgetary requirements

CONTENTS

This course will provide knowledge of models, concepts, tools, and techniques necessary to undertake strategic menu planning and product development. The objective of the course is to focus on developing analytical skills in the formulation and implementation of menu planning and product development. Menu planning and product development is the process of creating satisfied customers through the integration of all business functions and through the continuous search for a sustainable competitive advantage through innovation. Therefore, the course will cover current developments in menu planning and product development theory and practice.

Module -1 Introduction; the Food Service Industry

- Hotel Restaurants • Freestanding Restaurants • Food Service in Noncommercial Facilities.
- Food Service: A Diverse Industry Commercial Operations • Noncommercial Operations
- Food Service Origins, the Future of the Food Service Industry Organization of Commercial Operations Noncommercial Operations and Contract Management Companies.

Module -2 Menu Management; Nutrition for Food Service Operations

- Nutrition: The Science of Food, the Six Basic Nutrients • Nutrition Guidelines, Nutrition and Food Service Operations.
- Menu Planning • Nutrition Concerns in Purchasing • Nutrition Concerns in Storing • Conserving Nutrients during Food Preparation
- Standard Recipes and Nutrition • Nutrition and Food Service • Contemporary Dietary Concerns Calories • Fats and Cholesterol • Sodium • Food Allergies • Vegetarian Meals • Organic Foods

Module -3 The Menu

- Commercial Menu Pricing Styles, Table d' Hotel • A la Carte
- Combination, Non-Commercial Menu Styles, Fixed Menus, Cycle Menus.
- Types of Menus, Breakfast • Lunch • Dinner • Specialty, Menu Planning, Knowing Your Guests • Knowing Your Quality Requirements • Knowing Your Operation
- Menu Items • Menu Balance, Menu Design, Copy • Layout • Cover • Common Menu-Design Mistakes, Evaluating Menus, Menu Management Software, Pre costing /Post costing Software • Menu Engineering Software

Module -4 Food and Beverage Service

- Table Service • Buffet Service • Cafeteria Service • Other Types of Service, Providing an Enjoyable Experience for Guests, Standard Operating Procedures.
- Guest Service Training • Teamwork, Preopening Concerns & Activities, Inspecting Facilities • Following Reservation Procedures • Assigning Food Server Stations • Food Server Meetings, Guest Service, Service Sequence • Special Situations.
- Software and Reports • Technology and Guest Ordering, Food and Beverage Revenue Control Procedures Revenue Control and Servers

- Revenue Control and Beverage Personnel Increasing Food and Beverage Sales, Suggestive Selling • Selling Beverages Endnotes, Key Terms, Review Questions, Internet Sites

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

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ASSESSMENT AND EXAMINATIONS:

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- 2 Drysdale, J. A., & Galipeau, J. A. (2002). *Profitable menu planning*. Prentice Hall.
- 3 Eckstein, E. F. (1983). *Menu planning* (No. Ed. 3). AVI Publishing Co., Inc.
- 4 Gordon-Davis, L., & Van Rensburg, L. (2004). *The hospitality industry handbook on nutrition and menu planning*. Juta and Company Ltd.
- 5 Akerkar, R. (2009). *Diet Menu planning Using CBR*.
- 6 Lancaster, L. M. (1992). The history of the application of mathematical programming to menu planning. *European Journal of Operational Research*, 57(3), 339-347.
- 7 Irie, K., Fujii, N., Kokuryo, D., & Kaihara, T. (2020, August). A Study on Menu Planning Method for Managed Meal-Consideration of the Cost of Ordering Ingredients. In *IFIP International Conference on Advances in Production Management Systems* (pp. 679-685). Springer, Cham.

CA-112 MENU PLANNING & PRODUCT DEVELOPMENT (PRACTICAL) (01 Credit hr)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Different types of menus for different service styles & the principles of menu design
- Describe the factors that should be considered in the planning of different types of menus
- Describe the minimum information that should be contained on a written menu
- Recipes and menus for meal occasions/themes, and nutritional dietary requirements, different function sizes, for budgetary requirements

CONTENTS

This course will provide knowledge of models, concepts, tools, and techniques necessary to undertake strategic menu planning and product development. The objective of the course is to focus on developing analytical skills in the formulation and implementation of menu planning and product development. Menu planning and product development is the process of creating satisfied customers through the integration of all business functions and through the continuous search for a sustainable competitive advantage through innovation. Therefore, the course will cover current developments in menu planning and product development theory and practice.

Module -1 Component of Menu

- Categorize the different parts of a menu
- Selection of dishes and format for menu

Module -2 Making and Planning New Menu

- Try to write your own menu
- Comparison of your menu with standard menu

Module -3 Editing and Modifying Menu

- Critical analysis and correction of current menu
- Design online format of menu using different software

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

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SECOND YEAR, THIRD SEMESTER

Code	Course Title	C.H.	Course Type
HQ-03	Translation of Holy Quran	Non Credit	Compulsory
CA-201	English III: Technical Writing and Presentation Skills	03	Compulsory
CA-202	Basic courses III: Fundamental of Baking	02+01	Foundation
CA-203	Elective IV: Supervising Food Safety	02+01	Major
CA-204	Elective V: Kitchen Operations and Departmental Management	02+01	Major
CA-205	Elective VI: Modern Pakistani Cuisine	02+01	Major
CA-206	Any other VII: Project Management	03	Major
Total Credit hrs. Semester-III		18	

PRE-REQUISITE: HQ-02 Translation of Holy Quran**COURSE OUTLINE**

سورة الاعراف تا سورة يونس

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

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PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Identify and select many types of writing frequently required in a variety of careers,
- Practice audience analysis and develop effective communication strategies for a variety of audiences,
- Demonstrate writing the effective communication principles encouraged by professional writers
- Achieve a greater awareness of the importance of selecting and integrating graphics with written communication,
- Improve their ability to differentiate among and to use facts, inferences, and judgments.

CONTENTS

This course aims to enable students to write and present with impact, by improving their writing and presentation style, as well as enhancing interpersonal skills.

Module -1

- Grammar review
- Vocabulary Development
- Pronunciation
- Drills

Module -2

- The psychology of effective communication
- Principle of communication psychology

Module -3

- Presentation
- Report writing
- The need for business report
- Informational report
- Analytical reports

Module -4

- Writing headings and sub-headings
- Using visual aid
- Proof reading
- Presentations

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Blokdyk, G. 2019. Communication Skills A Complete Guide - 2019 Edition, 5STARCOoks.
2. Coleman, K. 2019. Effective Communication: Skills and Strategies to Effectively Speak Your Mind Without Being Misunderstood, Communication & Social Skills
3. Cenere, P., Gill, R., Lawson, C. and Lewis, M. 2015. Communication Skills for Business Professionals 7. Cambridge University Press.
4. Langan, J. (2013). College writing skills with readings. Tata McGraw-Hill Education.
5. Langan, J., & Winstanley, S. (2002). English skills with readings. McGraw-Hill.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES

- Demonstrate core concepts in baking theory and methodology through hands-on development and sensory analysis of American and European style baking and pastry products.
- Illustrate advanced classical and contemporary pastry and confectionery techniques in the planning, development, execution, and evaluation of products, menus, and creative presentations.
- Research and distinguish effective restaurant and patisserie operations including sustainable facilities, equipment, and evolving technologies.
- Employ leadership and supervision concepts with an emphasis on communication, cultural diversity, and positive guest relations.

CONTENTS:

Preparing students to be baking and pastry professionals through hands-on experience and the development of competency-based skills while emphasizing management and creativity. To know concepts and methodology of baking. To provide knowledge about confectionery techniques. To be able to prepare bakery products.

Module -1 Introduction:

- History of Bakery and Confectionery - Present Trends
- Prospects - Nutrition facts of Bakery & Confectionery goods

Module -2 Raw materials used in Bakery

- Flour - Types of flour - Flour characteristics
- Water - Sources - Functions - Usage of Water; Salt - Role of Salt, Yeast, Yeast Production
- Enzymes - their functions in dough 4. Sugar and Milk - Properties and Role of milk and Sugar in Bakery

Module -3 Leavening agents & Bakery Products:

- Leavening agents - Different Leavening agents - their functions in Baking Industry,
- Cocoa and Chocolate 8. Bakery unit operations including mixing - fermentation - Proofing - baking.

Module -4 Biscuits & Cakes

- Biscuits - Processing of biscuits - faults & Remedies, Cream crackers, soda crackers, wafer biscuits & matzos, puff biscuits, hard sweet, Semi Sweet, sandwich biscuit
- Processing of cakes, Problems, Remedies & pastries ingredients & Processing
- Bakery equipment required - types - Selection – Maintenance - Bakery norms.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

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RECOMMENDED TEXTBOOKS & SUGGESTED READINGS:

1. Bo Friberg, Amy Kemp Friberg.2018. **The Professional Pastry Chef.**4th Edition. John Wiley & Sons. Incorporation.
2. Marilyn Moll.2016. **A Beginners Guide to Baking Bread.** The Urban Homemaker.
3. Elna Miller. 2014. Enjoy Yeast Breads. Utah State University Extension. USU.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES

- Demonstrate core concepts in baking theory and methodology through hands-on development and sensory analysis of American and European style baking and pastry products.
- Illustrate advanced classical and contemporary pastry and confectionery techniques in the planning, development, execution, and evaluation of products, menus, and creative presentations.
- Research and distinguish effective restaurant and patisserie operations including sustainable facilities, equipment, and evolving technologies.
- Employ leadership and supervision concepts with an emphasis on communication, cultural diversity, and positive guest relations.

CONTENTS:

Preparing students to be baking and pastry professionals through hands-on experience and the development of competency-based skills while emphasizing management and creativity. To know concepts and methodology of baking. To provide knowledge about confectionery techniques. To be able to prepare bakery products.

Module – 1 Basic Mixing Methods:

- Learn Muffin method and its applications
- Learn Creaming method and its applications

Module – 2 Tarts Fillings:

- Different types of tarts
- Learn how biscuit method works for different applications
- Understanding of different types of pie/sweet tart dough and uses

Module – 3 Cookies and Brownies:

- Types of Cookies
- Mixing Methods
- Storing different cookie dough

Module – 4 Healthy Alternative Baking:

- Recognize dietary conditions that affect today's consumers
- Understand how to adapt bakeshop formulas to meet dietary needs

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS & SUGGESTED READINGS:

1. Bo Friberg, Amy Kemp Friberg.2018. **The Professional Pastry Chef**.4th Edition. John Wiley & Sons. Incorporation.
2. Marilyn Moll.2016. **A Beginners Guide to Baking Bread**. The Urban Homemaker.
3. Elna Miller. 2014. Enjoy Yeast Breads. Utah State University Extension. USU.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Recognize the importance of implementing food safety management procedures
- Recognize the responsibilities of those working in a catering environment in respect of food safety legislation and procedures for compliance
- Identify the process for applying a food safety management system into a food business
- Identify methods for, and the importance of, verifying food safety controls and procedures
- Recognize the responsibilities of those working in a catering environment when identifying and selecting suitable controls and monitoring, to prevent food safety hazards from purchase to service

CONTENTS

The objective of this course is to support a role in the workplace and give learners personal growth and engagement in learning. The course is designed for learners who wish to progress to higher or supervisory level within a food catering business. Topics include ensuring compliance with food safety legislation, the application and monitoring of good hygiene practice, how to implement food safety management procedures and the application and monitoring of good practice regarding contamination, microbiology, and temperature control.

Module -1 The application and monitoring of good practice regarding contamination, temperature control, personal hygiene, and cleaning:

- Identify the process of implementing and maintaining high standards of personal hygiene within a catering operation
- Recognize the requirements for induction and ongoing training of staff to ensure competency
- Identify the process of implementing procedures for cleaning, disinfection and waste disposal, Identify the actions that need to be taken with regards to pest control
- Recognize the responsibilities of those working in a catering environment when, identifying hazards posed by, and procedures to control, microbiological, chemical, physical and allergenic contamination.

Module -2 the requirements for ensuring compliance with food safety legislation and management procedures:

- Recognize the importance of implementing food safety management procedures. The terms: Food hygiene/safety, Food poisoning, Food safety hazard, Food safety management system.
- Main characteristics of food related illness, including the terms: Contamination, Cross-contamination, Causative agent, Food vehicle, Incubation/onset time, Pathogen, Common symptoms.
- Awareness of requirements for HACCP based procedures, Temperature control,

Contamination, Handling practices, Personal hygiene, Cleaning, and disinfection.

- The role of those working in a catering environment in internal and external food safety inspections/audits.

Module-3 Identify the process for applying a food safety management system into a food business:

- Food safety management systems. The importance of identifying hazards, control measures, monitoring actions, corrective actions, verification, and documentation.
- Responsibilities and daily activities of food handlers and supervisors to implement and monitor food safety practice and procedures, including opening and closing checks.
- Role of those working in a catering environment in ensuring appropriate corrective actions for deviations from control points in food production, including supervisory actions.
- The importance of providing feedback to those responsible for the food safety procedures and the types of issues you need to address.
- Responsibilities of those working in a catering environment with regards to verification. Role of an audit/inspection in verification

Module -4 Understand the application and monitoring of good practice

- Identify the process of implementing and maintaining high standards of personal hygiene within a catering operation.
- Handling practices, Protective clothing, Fitness to Work, including relevance of the term 'carrier'. Role of those working in a catering environment in securing high standards of personal hygiene.
- Open wounds and first aid dressings, Hand washing facilities that should be provided in a catering environment, and how these facilities can be managed and monitored on a day to day basis.
- The objectives and benefits of food safety training to ensure competency, the importance of training records, how to communicate standards and procedures to staff, how to assess the competency of staff.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS

Sr. No.	Elements	Weightage	Details
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

- 1 Motarjemi, Y., & Lelieveld, H. (Eds.). (2013). Food safety management: a practical guide for the food industry. Academic Press.
- 2 Shinha, K. K., & Bhatnagar, D. (1998). Mycotoxins in agriculture and food safety. CRC Press.
- 3 King, H. (2013). Food safety management: implementing a food safety program in a food retail business. Springer Science & Business Media.
- 4 Motarjemi, Y., & Lelieveld, H. (2014). Fundamentals in management of food safety in the industrial setting: challenges and outlook of the 21st century. In Food safety management. Academic Press.
- 5 Chen, K., WANG, X. X., & SONG, H. Y. (2015). Food safety regulatory systems in Europe and China: A study of how co-regulation can improve regulatory effectiveness. Journal of Integrative Agriculture, 14(11), 2203-2217.
- 6 Tong, X., & Zhang, H. (2020). Strengthening Stakeholder Involvement in Safety Supervision: A Case Study of Food Safety. In China's Emergency Management, Springer, Singapore.

CA-203: SUPERVISING FOOD SAFETY (PRACTICAL) (01 Credit hrs)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Recognize the importance of implementing food safety management procedures
- Recognize the responsibilities of those working in a catering environment in respect of food safety legislation and procedures for compliance
- Identify the process for applying a food safety management system into a food business
- Identify methods for, and the importance of, verifying food safety controls and procedures
- Recognize the responsibilities of those working in a catering environment when identifying and selecting suitable controls and monitoring, to prevent food safety hazards from purchase to service

CONTENTS

The objective of this course is to support a role in the workplace and give learners personal growth and engagement in learning. The course is designed for learners who wish to progress to higher or supervisory level within a food catering business. Topics include ensuring compliance with food safety legislation, the application and monitoring of good hygiene practice, how to implement food safety management procedures and the application and monitoring of good practice regarding contamination, microbiology, and temperature control.

Module – 1 Food Poisoning, Spoiling and Preservation:

- Symptoms of food Spoiling
- Methods to preserve the food
- Objectives of food preservation

Module – 2 Design and use of food premises and Equipment

- Design and layout of a food room
- Classification of food premises
- Uses of different Equipment

Module – 3 Cleaning and Disinfection

- Steps to clean and sanitize a food processing facility
- Importance of disinfection in food Industry

Module – 4 Principle of Hazard Control

- HACCP principles
- HACCP application
- HACCP guidelines

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Motarjemi, Y., & Lelieveld, H. (Eds.). (2013). Food safety management: a practical guide for the food industry. Academic Press.
2. Shinha, K. K., & Bhatnagar, D. (1998). Mycotoxins in agriculture and food safety. CRC Press.
3. King, H. (2013). Food safety management: implementing a food safety program in a food retail business. Springer Science & Business Media.
4. Motarjemi, Y., & Lelieveld, H. (2014). Fundamentals in management of food safety in the industrial setting: challenges and outlook of the 21st century. In Food safety management (pp. 1-20). Academic Press.
5. Chen, K., WANG, X. X., & SONG, H. Y. (2015). Food safety regulatory systems in Europe and China: A study of how co-regulation can improve regulatory effectiveness. Journal of Integrative Agriculture, 14(11), 2203-2217.
6. Tong, X., & Zhang, H. (2020). Strengthening Stakeholder Involvement in Safety Supervision: A Case Study of Food Safety. In China's Emergency Management (pp. 311-322). Springer, Singapore.

CA-204: KITCHEN OPERATIONS & DEPARTMENTAL MANAGEMENT (03 Credit hrs)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Understand operational management approaches and models, including creating plans to deliver objectives and setting KPIs.
- Understand business development tools (e.g., SWOT), and approaches to continuous improvement.
- Understand data security and management, and the effective use of technology in an organization.
- Know how to motivate and improve performance, supporting people using coaching and mentoring approaches.
- Understand approaches to partner, stakeholder and supplier relationship management including negotiation, influencing, and effective networking.
- Understand own impact and emotional intelligence. Understand different and learning and behavior styles.
- Understand time management techniques and tools, and how to priorities activities and the use of different approaches to planning, including managing multiple tasks

CONTENTS

The objective of the course is to support a role in the workplace, giving learners the opportunity to learn and evidence their knowledge and competency either as part of an apprenticeship or as a stand-alone qualification.

The course provides learners with the knowledge and skills in leadership and management such as: Leading people, Operational management, Building relationships, Project management, & Communication.

Module -1 Operational Management

- Explain operational management approaches and models, including creating plans to deliver objectives and setting KPIs.
- Explain business development tools and approaches to continuous improvement. Explain operational business planning techniques. Analyze and compare management systems, processes, and contingency planning.
- Explain how to initiate and manage change by identifying barriers and know how to overcome them.
- Explain data security and management, and the effective use of technology in an organization.

Module -2 Project Management

- Explain how to set up and manage a project using relevant tools and techniques.
- Explain process management. Explain approaches to risk management. Plan, organize and manage resources to deliver required outcomes.
- Monitor the progress of a project. Identify risk and put in place steps to mitigate them. Demonstrate use of relevant project management tools.

Module -3 Leading People

- Explain how to lead multiple and remote teams and manage team leaders. Explain how to motivate and improve performance.
- Explain how support people using coaching and mentoring approaches. Critically analyze organizational cultures and diversity and the impact this has on leading and managing change.
- Communicate organizational vision and goals and how these apply to teams. Support development through coaching and mentoring and enable and support high performance working.
- Manage talent and performance of team members. Develop, build, and motivate teams. Delegate and enable delivery through others.

Module -4 Communication

- Describe interpersonal skills and different forms of communication and techniques and how to apply them appropriately.
- Communicate effectively and be flexible in communication style. Chair meetings and present using a range of media. Use active listening and be able to challenge and give constructive feedback.
- Evaluate own impact and own emotional intelligence. Analyze different and learning and behavior styles. Reflect on own performance, working style and its impact on others.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Reid, R. D., & Sanders, N. R. (2019). Operations management: an integrated approach. John Wiley & Sons.
2. Puckett, R. P. (2012). Foodservice manual for health care institutions (Vol. 150). John Wiley & Sons.
3. Heide, M., Grønhaug, K., & Johannessen, S. (2002). Exploring barriers to the successful implementation of a formulated strategy. Scandinavian journal of management, 18(2), 217-231.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- To apply the latest modes of working, to master the various existing culinary techniques in Pakistani cuisine.
- To estimate, manage resources, and calculate costs, taking into consideration all necessary factors, from purchasing of basic resources, working with suppliers through to the final product, making use of strategic, administrative, and marketing concepts.
- To be able to manage a working team, making the best of their potential and supervising the activities of kitchen aids and auxiliaries, acquiring the necessary competence to solve different problems which may arise in work, as well as the efficient use of time, space, and human and material resources within the kitchen.
- To plan and carry out efficient leadership for the best preparation and elaboration of foods, always observing the safety and hygiene regulations in the workplace and following the instructions of a qualified professional.
- To acquire the knowledge which will allow you to conserve and handle different food resources, and to design and produce menus to meet the quality standards of each area of the market.

CONTENTS

Food is fundamental to life. Not only does it feed our bodies, but it is often the centerpiece for family gatherings and social functions. In this course, students learn all about Pakistani food, including food culture, food history, food safety, and current food trends in Pakistan. They also learn about the food service industry and prepare some Pakistani cuisine dishes. Through hands-on activities and in-depth study of the culinary arts field, this course helps students to enhance their cooking skills and gives them the opportunity to explore careers in the Pakistani food industry.

Module -1 Pakistani Cuisine:

- Introduction of Pakistani Cuisine, History of Pakistani Cuisine.
- Origin of Pakistani Cuisine, Food ingredient and spices used in Pakistani Cuisine.
- Cooking Techniques used in Pakistani Cuisine; Different terms used in Pakistani Cuisine.

Module -2 Soups & Appetizer B.B. Q & Kababs:

- Origin of Pakistani Soups and Appetizer recipes, Basic Techniques used for cooking.
- Soups and Appetizers in Pakistani Cuisine, Basic Terms Uses for Soups and Appetizers in Pakistani Cuisine, Basic ingredients used for cooking Pakistani Soups and Appetizer
- Origin of Pakistani B.B. Q & Kababs recipes, Basic Techniques used for cooking B.B. Q & Kababs in Pakistani Cuisine, Basic Terms Uses for B.B. Q & Kababs in Pakistani Cuisine, Basic ingredients used for cooking B.B. Q & Kababs

Module-5 Fish, Sea Food Chicken, Mutton and Beef:

- Origin of Pakistani Fish and Sea Food recipes, Basic Techniques used for cooking Fish and Sea Food in Pakistani Cuisine, Basic Terms Uses for Fish and Sea Food in Pakistani Cuisine, Basic ingredients used for cooking Fish and Sea Food
- Origin of Pakistani Chicken, Mutton and Beef recipes, Basic Techniques used for cooking Chicken, Mutton and Beef in Pakistani Cuisine, Basic Terms Uses for Chicken, Mutton and Beef in Pakistani Cuisine, Basic ingredients used for cooking Chicken, Mutton and Beef.

Module -4 Vegetables, Daal, Pulses, Rice, Salads and Desserts:

- Origin of Pakistani Vegetables, Daal & Pulses recipes, Basic Techniques used for Vegetables, Daal & Pulses in Pakistani Cuisine, Basic Terms Uses for Vegetables, Daal & Pulses in Pakistani Cuisine, Basic ingredients used for cooking Vegetables, Daal & Pulses.
- Origin of Pakistani Rice, Salads and Desserts recipes, Basic Techniques used for Rice, Salads and Desserts in Pakistani Cuisine, Basic Terms Uses for Rice, Salads and Desserts in Pakistani Cuisine, Basic ingredients used for cooking Rice, Salads and Desserts.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
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- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Irshad, S., Ashfaq, A., Muazzam, A., & Yasmeen, A. (2017). Antimicrobial and anti-prostate cancer activity of turmeric (*Curcuma longa* L.) and black pepper (*Piper nigrum* L.) used in typical Pakistani cuisine. *Pakistan Journal of Zoology*, 49(5).
2. Pennington, J. A. (1996). Cuisine: A descriptive factor for foods. *Terminology. International Journal of Theoretical and Applied Issues in Specialized Communication*, 3(1), 155-169.
3. Ali, S. S. Food for Thought: A Linguistic Analysis of the Menus in Karachi's Elite Cafes and Restaurants.
4. Mortillaro, E., Ahmed, N., West, B., Amin, D., Kamath, S., & Alekel, L. (1995). Dietary, Physical Activity, and Body Composition Factors in Indian and Pakistani Versus Caucasian Premenopausal Women. *Journal of the American Dietetic Association*, 95(9), A55.
5. Usmani, A., & Malik, M. A. Integration of Colonial food culture into Pakistani Cuisine.

CA-205: MODERN PAKISTANI CUISINE (PRACTICAL) (01 Credit hr)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- To apply the latest modes of working, to master the various existing culinary techniques in Pakistani cuisine.
- To estimate, manage resources, and calculate costs, taking into consideration all necessary factors, from purchasing of basic resources, working with suppliers through to the final product, making use of strategic, administrative, and marketing concepts.
- To be able to manage a working team, making the best of their potential and supervising the activities of kitchen aids and auxiliaries, acquiring the necessary competence to solve different problems which may arise in work, as well as the efficient use of time, space, and human and material resources within the kitchen.
- To plan and carry out efficient leadership for the best preparation and elaboration of foods, always observing the safety and hygiene regulations in the workplace and following the instructions of a qualified professional.
- To acquire the knowledge which will allow you to conserve and handle different food resources, and to design and produce menus to meet the quality standards of each area of the market.

CONTENTS

Food is fundamental to life. Not only does it feed our bodies, but it is often the centerpiece for family gatherings and social functions. In this course, students learn all about Pakistani food, including food culture, food history, food safety, and current food trends in Pakistan. They also learn about the food service industry and prepare some Pakistani cuisine dishes. Through hands-on activities and in-depth study of the culinary arts field, this course helps students to enhance their cooking skills and gives them the opportunity to explore careers in the Pakistani food industry.

Module – 1 Trends of Pakistani Cuisine:

- Understanding the dining trend of Pakistani Region
- Know various styles of cooking methods, tools and equipment used in Pakistani Cuisine.

Module – 2 Basic Spices, Sauces and Staples:

- Learn about basic spices, sauces and staples used for cooking in Pakistani food
- Making of Basic Sauces by Pakistani Methods

Module – 3 Recognize Traditional Herbs of Pakistani Cuisine:

- Prepare Salads from Pakistani Cuisine
- Prepare Curries/Greens from Pakistani Cuisine
- Prepare Rice Dishes of Pakistani Cuisine

Module – 4 Preparation of Pakistani Desserts and Breakfast:

- Basic Preparation of Sweets (Gulab Jamun, Kheer, Halwajaat etc)
- Presentation of Pakistani Sweets
- Preparation of Pakistani Breakfast

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

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- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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1. Irshad, S., Ashfaq, A., Muazzam, A., & Yasmeen, A. (2017). Antimicrobial and anti-prostate cancer activity of turmeric (*Curcuma longa* L.) and black pepper (*Piper nigrum* L.) used in typical Pakistani cuisine. *Pakistan Journal of Zoology*, 49(5).
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5. Usmani, A., & Malik, M. A. Integration of Colonial food culture into Pakistani Cuisine.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Manage the selection and initiation of individual projects and of portfolios of projects in the enterprise.
- Conduct project planning activities that accurately forecast project costs, timelines, and quality. Implement processes for successful resource, communication, and risk and change management.
- Demonstrate effective project execution and control techniques that result in successful projects.
- Conduct project closure activities and obtain formal project acceptance.
- Demonstrate a strong working knowledge of ethics and professional responsibility.
- Demonstrate effective organizational leadership and change skills for managing projects, project teams, and stakeholders

CONTENTS

The course trains in the basic principles of project management, including concepts from the initiating, planning, executing, monitoring & controlling, and closing process groups. Introduce fundamentals of project management knowledge areas, integration, scope, time, cost, quality, human resources, communications, risk, procurement, and stakeholder management. The objectives are:

Module -1

- Introduction to Project Management, Organizational Capability, Leading and Managing Project Teams, Project Selection and Prioritization.

Module -2

- Stakeholder Analysis & Communications Planning, Scope Planning, Chartering.
- Scheduling, Resourcing and Budgeting Projects.

Module -3

- Project Risk Management, Project Quality & Kick-off, Project Supply Chain Management
- Determining Project Progress & Results, Finishing the Project, and Realizing the Benefits.

Module -4

- Reviewing the Project Lifecycle, Large Scale & Iconic and Public Sector Projects, Events as Projects
- Triple Bottom Line Sustainability, Community Consultation & Engagement, Industry Speaker.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

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- Classroom Participation
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- Homework
- Attitude and Behavior
- Hands-on-Activities
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ASSESSMENT AND EXAMINATIONS:

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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Hartley, S. (2020). Project Management: A practical guide to planning and managing projects. Routledge.
2. Kuster, J. (2015). Project management handbook. Springer-Verlag Berlin Heidelberg.
3. Newton, R. (2013). The Project Management Book: How to Manage Your Projects to Deliver Outstanding Results. Pearson UK.
4. Cleland, D. I., & Gareis, R. (2006). Global project management handbook: Planning, organizing, and controlling international projects. McGraw-Hill Education.
5. Baars, W., Harmsen, H., Kramer, R., Sesink, L., & van Zundert, J. (2006). Project management handbook. Data Archiving and Networked Services, The Hague.

SECOND YEAR, FOURTH SEMESTER

Code	Course Title	C.H.	Course Type
HQ-04	Translation of Holy Quran	01	Compulsory
CA-207	Pakistan Studies	02	Compulsory
CA-208	Basic courses IV: Food Nutrition and Health	02+01	Foundation
CA-209	Elective VIII: Purchasing for Food Service Operations	03	Major
CA-210	Elective IX: Culinary Art Field Studies-I	01	Major
CA-211	Elective IX: INTERNSHIP	06	Major
Total Credit hrs Semester-IV		15	

PRE-REQUISITE: HQ-03 Translation of Holy Quran**COURSE OUTLINE**

سورة هود تا سورة الكهف

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

PRE-REQUISITE

Intermediate: F. A/F.Sc. / I. Com or equivalent

LEARNING OUTCOMES

- Basic knowledge of the events leading up to the creation of Pakistan; unfolding events to describe why Pakistan is what it is today, possible threats and opportunities facing Pakistan.
- Understanding of National Ethics; Culture and Civil Rights (Constitution of Pakistan) and Codes of Ethics and Codes of Conduct (provided by Pakistan Engineering Council).
- Understanding about geo-political, cultural, constitutional, and current issues prevailing in Pakistan.

CONTENTS

The course provides a complete knowledge of Pakistan movement. The course also focuses on the culture, people, geographical features, constitution evaluation, and contemporary issue of the country. The main objective of the course is to enhance students' knowledge about geo-political, cultural, constitutional, and current issues prevailing in Pakistan.

Module -1 Historical Perspective

- Ideological rationale with special reference to Sir Syed Ahmed Khan, Allamah Muhammad Iqbal, and Quaid-i-Azam Muhammad Ali Jinnah.
- Factors leading to Muslim separatism
- People and Land
- Indus Civilization
- Muslim advent
- Location and Geo-Physical features.

Module -2 Government and Politics in Pakistan

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

Module -3 Contemporary Pakistan

- Economic institutions and issues
- Society and social structure
- Ethnicity

Module -4 Policies

- Foreign policy of Pakistan and challenges
- Futuristic outlook of Pakistan

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

- 1 McLeod, D. (2016). India and Pakistan: friends, rivals, or enemies? Routledge.
- 2 Pande, A. (2011). Explaining Pakistan's foreign policy: escaping India. Routledge.
- 3 Zaidi, S. A. (2005). Issues in Pakistan's economy. OUP Catalogue.
- 4 Jalal, A. (2002). Self and sovereignty: Individual and community in South Asian Islam since 1850. Routledge.
- 5 Rabbani, M. I., & Sayyid, M. A. (1995). An Introduction to Pakistan Studies. Caravan Book House.

CA-208: FOOD NUTRITION AND HEALTH (Theory) (02+01 Hrs)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Understand the important principles of food and nutrition
- Understand the nutritional requirements and food choices
- Understand the relationship between diet and health
- Know how to promote healthy eating and incorporate it in daily routine and lifestyle

CONTENTS

Learners will gain essential knowledge and understanding of healthy food choices, planning, and adapting diets to suit various age groups and health conditions, micro and macro-nutrients, factors affecting food choices, allergies as well as intolerances, and necessary elements of communicating and promoting healthy diet principles.

Module -1 Understand the important principles of food and nutrition:

- Describe the fundamental elements of nutrition
- Macronutrients
- Micronutrients
- Fluids
- Balanced diet
- Digestion
- Absorption
- Basal metabolic rate
- Energy requirements
- Describe the different food groups that form the basis of healthy eating

Module -2 Understand the nutritional requirements and food choices:

- Explain the nutritional requirements for different age groups
- Describe the factors that affect food intake and food choices
- Explain the common factors leading to unhealthy food choices
- Outline how these common factors can be overcome and tackled individually or by professionals (nutritionist/psychologist)
- Outline the dietary requirements of ethnic minority groups

Module -3 Understand the relationship between diet and health:

- Describe the various nutrition related health disorders
- Explain the nutritional factor in some chronic diseases
- Outline suitable diet modifications/therapeutic diets/Medical Nutrition Therapy (MNT) for specific health conditions

Module-4 To promote healthy eating and incorporate it in daily routine and lifestyle:

- Outline the essentials of a healthy meal pattern
- Explain different cooking methods that help preserve nutritional value of the food
- Explain the conditions and pressures that might disrupt healthy eating
- Explain the principles of a healthy balanced menu

- Explain how to identify and evaluate the nutritional value of a food item
- Food labels Food stores Portion size
- Explain how to deal with 'Eating Outside'

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities

Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Carr, T., & Descheemaeker, K. (Eds.). (2008). Nutrition and health. John Wiley & Sons.
2. Rao, V. (Ed.). (2012). Phytochemicals: a global perspective of their role in nutrition and health. BoD–Books on Demand.
3. Piot, P. (2008). Nutrition and health in developing countries. Springer Science & Business Media.
4. Nnakwe, N. (2012). Community Nutrition: Planning Health Promotion and Disease Prevention-BOOK ONLY. Jones & Bartlett Publishers.
5. Ross, A. C., Caballero, B., Cousins, R. J., Tucker, K. L., & Ziegler, T. R. (2012). Modern nutrition in health and disease (No. Ed. 11). Lippincott Williams & Wilkins.

CA-208: FOOD NUTRITION AND HEALTH (Practical) (01 Hrs)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Understand the important principles of food and nutrition
- Understand the nutritional requirements and food choices
- Understand the relationship between diet and health
- Know how to promote healthy eating and incorporate it in daily routine and lifestyle

CONTENTS

Learners will gain essential knowledge and understanding of healthy food choices, planning, and adapting diets to suit various age groups and health conditions, micro and macro-nutrients, factors affecting food choices, allergies as well as intolerances, and necessary elements of communicating and promoting healthy diet principles.

Module -1 Understand the important principles of food and nutrition:

- Describe the fundamental elements of nutrition
- Macronutrients
- Micronutrients
- Fluids
- Balanced diet
- Digestion
- Absorption
- Basal metabolic rate
- Energy requirements
- Describe the different food groups that form the basis of healthy eating

Module -2 Understand the nutritional requirements and food choices:

- Explain the nutritional requirements for different age groups
- Describe the factors that affect food intake and food choices
- Explain the common factors leading to unhealthy food choices
- Outline how these common factors can be overcome and tackled individually or by professionals (nutritionist/psychologist)
- Outline the dietary requirements of ethnic minority groups

Module -3 Understand the relationship between diet and health:

- Describe the various nutrition related health disorders
- Explain the nutritional factor in some chronic diseases
- Outline suitable diet modifications/therapeutic diets/Medical Nutrition Therapy (MNT) for specific health conditions

Module-4 To promote healthy eating and incorporate it in daily routine and lifestyle:

- Outline the essentials of a healthy meal pattern
- Explain different cooking methods that help preserve nutritional value of the food
- Explain the conditions and pressures that might disrupt healthy eating
- Explain the principles of a healthy balanced menu

- Explain how to identify and evaluate the nutritional value of a food item
- Food labels Food stores Portion size
- Explain how to deal with ‘Eating Outside’

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Carr, T., & Descheemaeker, K. (Eds.). (2008). Nutrition and health. John Wiley & Sons.
2. Rao, V. (Ed.). (2012). Phytochemicals: a global perspective of their role in nutrition and health. BoD–Books on Demand.
3. Piot, P. (2008). Nutrition and health in developing countries. Springer Science & Business Media.
4. Nnakwe, N. (2012). Community Nutrition: Planning Health Promotion and Disease Prevention-BOOK ONLY. Jones & Bartlett Publishers.
5. Ross, A. C., Caballero, B., Cousins, R. J., Tucker, K. L., & Ziegler, T. R. (2012). Modern nutrition in health and disease (No. Ed. 11). Lippincott Williams & Wilkins.

CA-209 PURCHASING FOR FOOD SERVICE OPERATIONS (03 Credit hrs)

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

- Describe the importance of the purchasing function, identify the primary and secondary members of the food service distribution channel, and evaluate the value proposition each member provides to the end user.
- Describe the steps in the purchasing process, the skills, knowledge, and behaviors required in purchasing personnel, and the role of food service operator ethics in purchasing.
- Identify the characteristics of distributor partners, describe the process to select distributor partners, and explain the essentials of ethics from a distributor's perspective.
- Identify the elective categories of fish and shellfish and describe the primary characteristics of each.
- Identify the elective growing areas, availability times, pricing factors, and storage issues for fresh fruits and vegetables.
- Identify factors to consider when purchasing capital equipment, supplies, and small ware, and services.

CONTENTS:

This course is aimed at individuals who are, or intend to be, food handlers working in catering. The objective of this course is to prepare learners for employment in catering role, or to support a role in the workplace. The law requires that all food handlers need to be trained according to their food handling work activities. Should an employee achieve a high field food safety qualification, which is suitable for the work they do, it will assist food business operators in proving that they have displayed due diligence and are therefore compliant in the eyes of the law.

Module -1 Purchasing in the Food Service Distribution Channel:

- Describe the importance of purchasing.
- Identify the primary and secondary members in the food service distribution channel.
- Describe the forces affecting the distribution system.
- Evaluate the value proposition that each member provides to the end user.
- Detail the process to assess a distributor partner, including the role of key performance indicators.
- Explain the key performance indicators that food service operators can use to leverage their purchasing proposals.
- Describe the necessary checks and balances in distributor relationships.

Module -2 Competencies for Food Service Operations:

- Identify the food service segments.
- Contrast the different structures of food service organizations.
- Describe the food service process flow from menu planning to cleaning and maintenance.
- Describe the characteristics of the purchasing control point.

- Explain the importance of customer requirements, particularly in the context of lifestyle changes and the shift to healthier dining.
- Explain the role of the internal customer and how these staff members create and deliver value through purchasing.
- Describe the essentials of food safety in a food service operation.

Module -3 Purchasing Systems and Personnel:

- Detail how purchasing contributes to managing for quality and the steps in the purchasing process.
- Describe the methods used to determine value in the purchasing process.
- Describe the skills, knowledge, and behaviors required in effective purchasing personnel, and describe the management and leadership activities in the purchasing system.
- Define the market, distributor, and internal areas of market research.
- Describe the role of food service operator ethics in purchasing.
- Identify the components of group purchasing.
- Describe the basic elements of food purchase specifications and the purchase order system.
- Identify the basic elements of pricing and cost controls.
- Describe the ordering process, including e-purchasing.
- Describe the security considerations of food service operations.

Module -4 The Distributor:

- Identify the characteristics of distributor partners.
- Describe the process to select distributor partners.
- Define the food security and defense considerations of distributors.
- Identify the food safety and HACCP essentials for distributors.
- Explain the essentials of ethics from a distributor's perspective.
- Explain the role of distributors in helping a food service operation to become more effective.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Khan, M. A. (1991). Concepts of foodservice operations and management.
2. Spears, M. C. (1995). Foodservice organizations: A managerial and systems approach.
3. Gregoire, M. B., & Strohbehn, C. H. (2002). Benefits and obstacles to purchasing food from local growers and producers. *Journal of Child Nutrition and Management*, 26(2).
4. STROHBEHN, C. H., & GREGOIRE, M. B. (2003). Case studies of local food purchasing by central Iowa restaurants and institutions. *Foodservice research international*, 14(1), 53-64.
5. Garlough, R. B. (2010). *Modern Food Service Purchasing: Business Essentials to Procurement*. Cengage Learning.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES

- This course emphasizes on the practical aspects of a visit.
- Students will be visiting the real-world hotels/restaurants to gain the real-world experience.
- Details will be submitted in the form of a tour report.

COURSE INTRODUCTION AND OBJECTIVES

Introduction to Tourism and hospitality Field Trip, how to conduct a Tour, Pre-Planning for a tour, organizing a tour, SWOT analysis, PEST analysis, conducting a survey, how to write a report, Presentation skills.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
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- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Field Visit	50%	It takes place at any point during the semester
2.	Report Writing	25%	Students must submit their visit report within one week after the field visit.
3.	Viva Voce on Field Report	25%	It takes place after the submission of Field Tour Report.

PRE-REQUISITE

Intermediate: F. A/ F.Sc. / I. Com or equivalent

LEARNING OUTCOMES:

Students will be trained to carry out and conduct extensive research work / fieldwork, analyze data and present in the form of internship report.

ASSESSMENT AND EXAMINATIONS:

- Quality of Internship Report
- 100% (06 credit hrs weightage) for Thesis / Internship Report and Viva Voce Examination

SECOND YEAR, 5TH SEMESTER

Code	Course Title	C.H.	Course Type
HQ-05	Translation of Holy Quran	Non Credit	Compulsory
CA-301	Statistics	02+01	Compulsory
CA-302	Gastronomy	03	General
CA-303	Food and Beverage Operation and Cost Management	03	General
CA-304	Presentation and Visual Effect on Food	02+01	Foundation
CA-305	Leadership, Marketing and Entrepreneurship	03	Major
CA-306	Art of Garde Manager	02+01	Major
Total Credit hrs Semester-V		18	

PRE-REQUISITE: HQ-04 Translation of Holy Quran**COURSE OUTLINE**

سورة مريم تا سورة الفرقان

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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PRE-REQUISITE

CA-109 Mathematics

LEARNING OUTCOMES:

- Students will be able to calculate and apply most measures of central tendency.
- Students will be able to apply discrete and continuous probability distributions to most business problems.
- Students will perform test of hypothesis and calculate confidence interval for a population.
- Students will be able to compute most of the results of bivariate and multivariate correlation and regression

COURSE INTRODUCTION AND OBJECTIVES:

This course focuses on the development of skills for performing statistical computations and analyzing data. Topics include measures of central tendency and variation; probability concepts, rules and distribution; normal and sampling distributions; hypothesis tests; and descriptive and inferential methods in regression correlations, and price indexes.

Module 1: Introduction:

- Basic Definitions and Concepts, Presentation of Data.
- Three Popular Data Displays, Measures of Central Location/ Central tendency measures of Variability.
- Relative Position of Data, The Empirical Rule and Chebyshev's.

Module 2: Basic Concepts of Probability & Variables:

- Sample Spaces, Events, and Their Probabilities, Complements, Intersections, and Unions.
- Conditional Probability and Independent Events, Discrete Random Variables: Random Variables, Probability Distributions for Discrete Random Variables.
- The Binomial Distribution. Continuous Random Variables: Continuous Random Variables, The Standard Normal Distribution, Probability Computations for Minor Elective Normal Random Variables, Areas of Tails of Distributions.

Module 3: Sampling Distributions & testing:

- The Mean and Standard Deviation of the Sample Mean the Sampling.
- Distribution of the Sample Mean the Sample Proportion, the Elements of Hypothesis.
- Testing, Large Sample Tests for a Population Mean the Observed Significance of a Test, Small Sample Tests for a Population Mean Large Sample Tests for a Population Proportion.

Module 4: Correlation and Regression:

- Linear Relationships Between Variables, The Linear Correlation Coefficient Modeling.
- Linear Relationships with Randomness Present, The Least Squares Regression Line.
- Statistical Inferences About?, Determination, Estimation and Prediction.

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

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- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. G C Beri (2017). Business Statistics (With CD) 3rd Edition.
2. Amir D. Aczel (2018). Complete Business Statistics 7th Edition.
3. Rao (2013). A First Course in Probability and Statistics.
4. Waller D L (2017). Statistics for Business Edition English,

PRE-REQUISITE:

CA-106 Introduction to Culinary Arts

LEARNING OUTCOMES:

Upon successful completion of this course, the students will be able to

- Explain the history, evolution of cuisine and different culture of food globally.
- Demonstrate the evolution of French cuisine and development of modern food outlets and Technology invasion.
- Describe the food habits in relation to different culture and scientific revolution.
- Interpret the entire taste profile and understand the impact of taste as one of the strongest criteria in the case of food business.
- Explain the rise in vegetarian, Vegan and other health related food.

CONTENT:

To instruct the students with an in-depth knowledge of the gastronomic journey on the evolution and revolution of food. Students who wish to adopt cooking as their career and to grow up the ladder, it is important to understand the food practices of different region, rituals and culture associated with certain food habits based on century old ancestral practices. This also establishes a clear path on how food preparation moved from one cycle to another cycle like haute, nouvelle, fusion cuisine.

Module I: Definition of food and taste

- Understanding taste buds and taste as perceiving senses.
- History of food and changes in food habits reflecting how it evolved- Hunters approach, application of heat, process of fermentation, appreciating taste and flavor of food and liquid food.
- Evolution of cuisine and artistic approach to give a sense of style.

Module II: Understanding different culture of food

- Upper and lower class food.
- Banquet and street food.
- Understanding Jewish and Muslim food.
- Colour of food, table manners, Chinese Yin and Yang Indian Hindu meal.
- Customs and traditions, influence of natural ingredients and consumption pattern.
- Understanding South American, Caribbean and African food habits.

Module III: Understanding Haute cuisine

- 17th Century Food habits in relation to cuisine and cultural linkage.
- Invasion of Technology and scientific revolution of food. Invention of stove, Heat transfer.
- Introduction of cereals, pulses, vegetables, Tea, Meat and Fish in to the kitchen.

Module IV: Crème the architect of French cuisine

- Brillat Savarin- Classical French cuisine.

- Contribution of cuisine by Paul Bocusse and Escoffier, evolution of Cajun and Creole food.
- Invention of canned food, QSR, Tetra pack, dehydrated food. Food safety concerns in commercial outlets.
- Standardization of food, cook books, online recipes and YouTube

Module V: Reshaping the Condition for good Health

- Vegetarianism, rise in regional/continental cuisine.
- The Complex model with in Flow of events leading to different health outcome. e.g. Italian, American, Jewish American, Indo-Chinese.
- Role of ready to use food, light food and convenient food.

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- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Linda Civitello Willey - Cuisine and Culture- History of food and people - Publishing 2nd edition March 2007.
2. Phyllis Pray Bober- Art culture and cuisine- Ancient and Medieval Gastronomy- Unit of Chicago Press July 1999.
3. Eleanor Scully - History of food: by John Wilkins- Shaun Hill Publishing January 2006. Early French cookery Modern adaptation - University of Michigan press 1996

CA-303: FOOD AND BEVERAGE OPERATION AND COST MANAGEMENT

(03 Credit hrs)

PRE-REQUISITE:

CA-105: Food and Beverages Management

LEARNING OUTCOMES:

Upon successful completion of this course the students will be able to

- Apply the methodology of cost control and evaluate the obstacles in the process of food production.
- Manage quantity food production, pricing and sale of the product.
- Implement the standard recipes and describe the menu engineering and how it impacts the bottom line.
- Explain the catering cycle and application of control throughout the cycle in order to be more efficient.
- Recognize the importance of purchasing and discuss the system and procedures.

CONTENT:

In many hotel and catering establishments the expenditure on food is the largest single element of cost. The maintenance of food cost at predetermined level is, therefore, of the greatest importance in ensuring the satisfactory profitability of each establishment. To ensure and sustain profitability it is important to analyze the income and expenditure periodically using the data, pricing and operation efficiency report.

Module I: The Elements of Food Costing

- Definition and Nature of Food Cost Control.
- Objectives of food cost control.
- Methodology of food cost control, concept of profit and obstacles of food cost control.
- Elements of cost and cost dynamics- fixed and variable cost.

Module II: Budgeting

- Budgeting for food operation- sales budget and cost of sales.
- Labor cost and overhead cost.
- Operation control in relation to catering cycle.
- Application of control throughout the cycle in order to have the top class efficiency in all areas.

Module III: Purchasing Procedure

- Purchasing defined as a function concerned with search, selection, purchase, receipt, storage.
- Final use of commodity in accordance with the policy of the establishment.
- Purchase specification and contract policy.
- System and procedure of receiving Storing and issuing

Module IV: Food Preparation

- Preparation of food, volume forecasting, standard yields.
- Preparation of standard recipes, standard portion size.
- Standard specification chart of the menu.

- Pricing strategy for a la carte table d' hÔte and buffet menu, sales mix and volume of sales in relation to profit.

Module V: Menu Engineering

- Menu Engineering - a methodology to check the most preferred dishes
- Check the movement of food items in the menu based on sales mix.
- How it helps the operation to track each item and how the entire process impact the bottom line.

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- Classroom Participation
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- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Bernard Davis, Richard Kotas- Food cost control - Published by International Textbook Company Limited -1976
2. Michael L Kasavana -Menu engineering: A practical guide to menu analysis Paperback – 1982

CA-304: PRESENTATION AND VISUAL EFFECT ON FOOD (02+01 Credit hrs)

PRE-REQUISITE

CA-111: Food Production Management

LEARNING OUTCOMES:

Upon successful completion of this course the students will be able to

- Analyze the visual appetite and practice innovative design of food.
- Evaluate and follow the key elements while presenting the food.
- Access the visual appeal, sensory evaluation and analyze the effect
- Develop the techniques of garnishing and basic rules of presentation

CONTENT:

The students will be afforded an opportunity to understand and appreciate the importance of attractive presentation of food with natural ingredients. Understand how important to create a composition of food, selecting the key component to add a visual impact without compromising or altering the recipe. Students made to understand that visually good food influence the perception of quality and overall enjoyment of food. New trends also is all about creative presentation

Module I: Balancing the key elements for presentation

- Understand the importance of well-presented food with a balance of colour Texture shape and portion size.
- How it impacts the mood of the consumer.
- Attractive food- its challenges, benefits.
- Role of external accessories in plate, buffet food presentation, trend, choices expectations.
- Visual cooking and interactive cooking advantages.

Module II: Techniques and rules for presentation

- Garnish- history of garnish and modern style of garnishing.
- Tips and rules for presentation.
- Aesthetics of plate styles and shapes, core garnishing techniques and understanding.
- Importance of special tool required for presentation, sauces, Gravies, oils, salsa, foliage, flowers, fruit, and flour based garnishes.

Module III: Relation between senses and innovative design of food

- Hierarchy of senses/relation to food.
- Understanding the food in relation to taste buds and eyes(science of taste and Art of food).
- Visual appetite and its representation created by innovative food design and continuous development through the visual sensory inputs.

Module IV; Visual effect and analysis

- Sensory evaluation of food.
- Factors affecting visual impact.
- Underdone and overdone, redefinition and enhancement.

- Visual analysis, acceptance and satisfaction to the tongue and eyes,
- Overall a sense of great visual appeal.

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. Christopher styler - The art of food presentation by published by John Wiley& sons 2006.
2. Hobday- Food presentation secrets, Cara Published by Firefly books Ltd, 2009.
3. Carolyn Krosmeier- Making sense of taste- Food and Philosophy Published by Cornel University press October 2002.
4. Howard R.Moskowitz- Sensory and consumer Research in food products and development Published by Black well publishing Ltd 1st Edition July 2006

CA-305 LEADERSHIP, MARKETING AND ENTREPRENEURSHIP

PRE-REQUISITE

CA-104: Principles of Management

LEARNING OUTCOMES:

Upon successful completion of this course the students will be able to

- Discuss the organization structure and key functions of management
- Evaluate the human behavior and style- key ingredients for leadership, and Motivation techniques.
- Effectively plan and assess the manning requirement for a small area of function and ability to understand the impact of training
- Appreciate the booming start-ups and basic steps in starting new business to become an entrepreneur.
- Plan for sales and effect of marketing under the very competitive environment.

CONTENT:

Planning is paramount important in every field of work. This portion imparts students the essential elements of planning and decision making. It also gives answer to the various questions in management organization behaviour, sales and marketing, and entrepreneurship.

Module I: Definition of Management

- Its nature and purpose.
- Function of Management.
- Planning and its importance.
- Decision making its importance and how it impacts the output.
- Organizing-Structure, Departmentalization- Basic pattern.
- Advantage and disadvantage of each, Delegation and decentralization

Module II: Leadership

- Nature of leading and leadership.
- Defining leadership, ingredients of leadership, leadership behaviour and style.
- Importance and effect of behaviour and style.
- Motivation- special motivation techniques.

Module III: Manpower planning

- Concept planning, product definition.
- Job analysis, job description, job evaluation, and job enrichment.
- Sourcing, recruiting, training and development, performance evaluation and control.

Module IV: Sales and Marketing

- Basics of marketing and sales concepts and principles.
- The fundamentals of marketing.
- Its relationship to the food and beverage.
- How it will enhance the chefs overall carrier.

Module V: Entrepreneurship

- Introduction and evolution of the concept of entrepreneurs.
- Characteristics and function of entrepreneur.
- Entrepreneurship development and basic steps in starting business.

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RECOMMENDED TEXTBOOKS/ SUGGESTED READINGS:

1. S. Senthil, M Arokiaraj- Entrepreneurship development - ARS Publications 2016
2. P C Tripathi - Principles of Management Paperback - McGraw Hill Education Publication 2008
3. V Vijayakumar- Production Planning and control - TECHNICAL PUBLICATIONS 2008

PRE-REQUISITE:

CA-106: Introduction to Culinary Arts

LEARNING OUTCOMES:

Upon successful completion of the course the students will be able to

- Discuss the recipes for cold sauces, varieties of lettuce and salad preparations.
- Discuss the types of sausages and different types of bacon, processing of Ham and curing Process.
- List different types of finger food and cocktail snacks, accompaniments for cheese board.
- Identify the pate Terrine and Galantine.
- Summarize the forcemeat preparation and its derivatives.

CONTENT:

To introduce to the students various activities happening in Garde manger, processing and preparation of cold food, Hors d'oeuvres and charcuterie

Module I: Introduction to Larder

- Larder function, Layout, key equipment and chefs responsibilities.
- Cold sauces- preparation of emulsified sauces.
- Preparation and uses of Cumberland sauce, Horseradish sauce and Mint sauces.
- Varieties of salad leaves, Mesclun, types and parts of salads.
- Presentation and modern ingredients to salads- edible flowers, dust and powders.
- International salads and dressings and Raw fish salad Ceviche.

Module II: Appetizers and presentation of Hors d'oeuvres

- Guidelines for selection of hors d'oeuvres and international equivalent.
- Finger food and its basic principles.
- Banquet and a la carte styles canapés.
- Barquettes, tartlets, choux puffs and carolines – preparation and presentation.
- Classic and modern appetizers plating and presentation.
- Types of sandwiches and innovative stuffing.
- Types of cheese and cheese board presentation.

Module III: Forcemeat preparation

- Spice mix for forcemeat, different types and definition.
- Fabrication, grinding, molding, forming, cooking and storage.
- Panada- types and uses.
- Types and definition of Mousse, parfait and quenelles.
- Methodology of preparation of mousse and presentation.

Module IV: Pate, Terrine and Aspic

- Definition and Preparation of Pate and Terrine.
- Preparation and assembling of pate, types of lining for pate- pate dough and fat lining.
- Country style terrine, assembling and cooking terrine.
- Preparation of Galantine, Ballotine and roulade.

- Brines, cures and Marinades preparation and uses.
- Preparation of various types of Aspic and jellies, uses of Aspic.
- Preparation and uses of Chaud froid. Gelatin- its usage and types.

Module V: Charcuterie

- Elective categories of sausage and three types of meat ingredients used in sausages.
- Curing agent in sausage making and its functions.
- Different type of casing advantage of using natural casing.
- Types of Brines, Method of Curing, Uses of Marinades.
- Types of ham, curing and drying of ham.
- Types of bacon and processing of bacon.

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1. Kinton & Cessarani- Practical cookery - Hodder & Strouhton Educational, London 2004
2. Anthony D Reilly - The Complete Cookery Manual - Longman Group Ltd., UK. 1993
3. Clive Finch - Food Preparation An International Approach Paperback- Pearson Education 1999
4. H.L. Cracknell - Practical Professional Catering– Publisher Cengage Learning Vocational 1998
5. Culinary Institute of America (Author) - Garde Manger: The Art and Craft of the Cold Kitchen - Wiley 2012

PRE-REQUISITE:

CA-106: Introduction to Culinary Arts

LEARNING OUTCOMES:

Upon successful completion of this course the students will be able to

- Discuss the elective functions of a cold kitchen and its relation to the main or other kitchens.
- Demonstrate food preparation in a professional manner while developing skills for safe work habits.
- Prepare a variety of cold dishes commonly prepared in Garde manger departments.
- Understand the limitations of written recipes and the importance of using judgment in cooking.

Menu 1

- Salads and dressings
- 1000 Island
- Blue cheese dressing
- Marie rose
- Remoulade
- Balsamic dressing
- Caesar dressing

Menu 2

- Ceviche, raw papaya salad, shrimp remoulade, Lobster salad, Caesar salad, Apple and orange salad
- Cobb salad, Tuna salad
- Aspic and Gelee
- Mousse and Mousseline
- Chaud-froid

Menu 3

- Force meat
- Chicken mousse
- Liver parfait
- Seafood pate
- Chicken Galantine, country style pate

Menu 4

- Vegetable terrine
- Potato and mushroom pate
- Beef wellington Chicken liver mousse in egg
- Cheese platter setting and accompaniments Broccoli mousse Carrot timbale
- Platter set up and garnish with pate and terrine 49

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4. H.L. Cracknell - Practical Professional Catering– Publisher Cengage Learning Vocational 1998
5. Culinary Institute of America (Author) - Garde Manger: The Art and Craft of the Cold Kitchen - Wiley 2012

Third YEAR, 6th SEMESTER

Code	Course Title	C.H.	Course Type
HQ-06	Translation of Holy Quran	01	Compulsory
CA-307	Western Cuisine	02+01	Compulsory
CA-308	Nutrition and Wellness	03	General
CA-309	The Art of Butchery	03	Foundation
CA-310	Research Methods and Techniques	03	Foundation
CA-311	Food Formulation	03	Major
CA-312	Kitchen Gardening	02	General
CA-313	Culinary Arts Field Studies-II	01	Major
Total Credit hrs Semester-V		18	

PRE-REQUISITE: HQ-05 Translation of Holy Quran**COURSE OUTLINE**

سورة الشعرا تا سورة ص

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PRE-REQUISITE:

CA-111: Food Production Management

LEARNING OUTCOMES:

- Upon successful completion of this course the students will be able to
- Appreciate the importance of breakfast and will be able to demonstrate the breakfast dishes.
- Describe the relation similarities and difference in flavours and main highlights western, continental and Middle East food.
- Demonstrate the classic and contemporary sauces.
- Exhibit the advance cooking methods and plan menu based on principle of cooking methodology.
- Display professionalism in organizing the kitchen.

CONTENT:

Role of chefs in modern culinary world, code of conduct and ethos being a culinarian, and how responsible to become a chef. Concept of cooking simple and effective approach. Understanding of all building blocks and the importance of mise-en- place. Recipe formulation and its basic rules, weight and measures, its importance, standard recipes for consistency, flavoured oil, vinegars, relish and taste adders. Understand the usage of some of the great exotic flavourful ingredients. Palate development and appreciating the correct seasoning the food.

Module I: SAUCES & GRAVIES

- Every chef takes great pride in the sauces that transform a good meal into a great dining experience.
- From the classic sauces of France to modern salsas, relishes, infused oils, coulis and chutneys explore all the diverse expressions of the saucier's art.
- Sauce Innovation Flavour, freshness, Contemporary and Proprietary Sauces.

Module II: Menu Engineering

- Compiling menu and conceptualization of dishes, plating, design and presentation.
- Elements required for finishing touches for great eye appeal.
- Principle of cooking methodology.
- Dry-heat cooking methods
- Moist-heat cooking methods.

Module III: Breakfast, Brunch, and Lunch

- Techniques and ingredients used in meals.
- From egg cookery and crêpes to sandwiches, vinaigrettes and dressings.
- Legume, grain, timbale, and soufflé techniques.

Module IV: Cuisine of France:

- Familiar with characteristic ingredients, methods and dishes from Provence, Burgundy, Normandy, and Alsace.
- Cuisine of Italy

- Cuisine of Middle East, Spain, Greek and Mexico and its flavourful combinations spices
- Modern techniques and approach to food cooking and presentation, sous vide cooking, an overview.

Module V: Modern culinary masters

- As cuisine has evolved and transformed over time, chefs have become innovators, visionaries, and artists.
- Best chefs in the industry will interact with each one in preparing recipes specially selected by the chefs.
- Students come to understand the unique perspective of each and every ideas that will spark their own creativity.
- The course concludes with market basket cooking classes where students can individually express their interpretation of the masters’ lessons.

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RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Wayne Gisslen, (2011) Professional Cooking, 9 th ed. New Jersey: John Wiley & Sons, Inc.
2. Mary Deirdre (1997). The Food & Beverage Institute Cooking essentials for the new professional chef, Canada: John Wiley & Sons, Inc
3. Parvinder S. Bali, “Food Production Operations”, 2009, Oxford University Press, India.
4. North American Meat Processors Association - (2007). The meat buyers guide: meat, lamb, veal, pork and poultry

PRE-REQUISITE:

CA-111: Food Production Management

LEARNING OUTCOMES:

On successful completion of the practical the students will be able to

- Display the essentials of traditional cookery, which has made possible evolution of the kitchen.
- Practice the culinary techniques and master the most advanced culinary applications.
- Prepare food and be knowledgeable in the culinary techniques from near and far cultures.
- Explain the gastronomic properties and best applications of products from around the world

CONTENT:

To develop multiple techniques and systems of production and food preparation to answer the daily and basic gastronomic demands, as well as complex and creative preparations. • To recognize the optimum point for the consumption of raw products. To break down the organoleptic properties of foods to obtain their ideal blend, understand their physical and chemical properties and their behaviour during the cooking process. To identify the most appropriate and innovative techniques for the processing of foods as a function of product characteristics, their subsequent use and customer needs.

Menu-1: Double consommé with liver quenelles, grilled beef tenderloin, cobb salad, steak de seer en papillote Creamed spinach tart, crème brûlée.

Menu -2: Pumpkin soup with chicken breast and fried ginger, aubergine, goats' cheese and pesto toast, Lamb estouffade with garlic bread, Parsley potato, Mud pie

Menu-3: Mousseline of fish with tomato puree, Tortellini of ratatouille with gazpacho, Garlic braised whole chicken with flageolets and roasted leeks, Braised leeks and red pepper, lemon mousse

Menu -4: Mushroom soup cappuccino, Stuffed lamb leg for roasting, Grilled aubergine and tomato, Mushroom and chestnut risotto, Ricotta tart

Menu-5: Crab bisque, Poulet poelechimay, Quiche Lorraine, Tomato farcies, Strawberry bavarois

Menu-6: Chicken lime avgolamono soup (kotosoupaavgolamono), Tzatziki- yoghurt and cucumber salad/ tapenade, Greek Gyros –Horiaticisalata, Moussaka of lamb, semolina pudding

Menu-7: Broccoli soup with cheese ravioli, Millefeuille of red mullet, Bouchees de crustaces bercy Red cabbage and mashed potato, brandy snap and coffee & date mousse

Menu-8: Tortilla espagnole, Paella, Empanadas/ Aioli Pisto

Menu-9: Hummus, Shish taouk, Falafel, Moroccan couscous vegetables Moroccan meatball tagine (Keftya Mkaouara)

Menu-10: Buns with bbq chicken and chili jam, BBQ fish with pickled vegetables, Spicy prawn and avocado with chipotle mayo and crispy vermicelli, Sticky Asian lamb with sesame fried brown rice

Menu-11: Fried potato and fried egg, Poached fish in dill cream sauce, German style creamed spinach Panko coated chicken schnitzel, Sautéed German sausage with bacon and apple sauerkraut Spaetzli with gruyere cheese and caramelized onion

Menu-12: Corn chowder with jalapeno cream, sizzling calamari salad with potato string, Red snapper with spring vegetable vinaigrette, Cannelloni roll with spinach and ricotta

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2. Mary Deirdre (1997). The Food & Beverage Institute Cooking essentials for the new professional chef, Canada: John Wiley & Sons, Inc
3. Parvinder S. Bali, (2009) “Food Production Operations”, Oxford University Press, India.
4. North American Meat Processors Association (2007). The meat buyers guide: meat, lamb, veal, pork and poultry.

PRE-REQUISITE:

CA-111: Food Production Management

LEARNING OUTCOMES:

- Appreciate the philosophy of health and wellness as the basic courses upon which optimum nutrition is achieved.
- Advocate culinary nutrition to the health and wellness of a Nation.
- Complete an in-depth study of integrative nutrition in the areas of nutrients, phytochemical, food allergy, food intolerance and food safety.
- Apply lifestyle and nutritional assessment techniques and relate to food as part of our lives.
- Educate others about holistic nutrition, lifestyle, wellness, and healthy living.

CONTENT:

Learn the role of nutrition in relation to health and the prevention of chronic disease. Learn the effects of phytochemicals on health and disease. Determine nutrient needs, nutritional supplements and recommendations associated with different life cycle stages. Evaluate nutrition information based on scientific reasoning for culinary and food service application.

Module I: Food, Nutrition and Health

- Relationship between food, nutrition and health.
- Functions of food physiological, psychological and social,
- Food Safety

Module II: Nutrition during Lifecycle

- Nutrients – Carbohydrates, Protein, Fats, Vitamins, Minerals, Water, Phyto-chemicals
- Physiological considerations and nutritional concerns for the following life stages:
- Adult man / woman
- Preschool children
- Adolescent children
- Pregnant woman
- Nursing woman and infant

Module III: Health and Wellness

- Lifestyle relates to food choices
- Nutrition Guidelines for health and fitness
- Nutritional Supplements

Module IV: Nutrition Education

- Importance of Nutrition Education in Catering and Fast Food Business
- Therapeutic Nutrition
- Food Allergy and Food Intolerance

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RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Jacqueline Marcus (2013). Culinary Nutrition- 1st Edition - Academic Press-
2. Elson M Hass, MD (2006). Staying Healthy with Nutrition - The Complete Guide to Diet and Nutritional Medicine Paperback -2006
3. George Mateljan (2015). The world's Healthiest foods -The Force for Change To Health-Promoting Foods and New Nutrient-Rich Cooking Paperback -
4. Mark Bittman (2009). Food Matters- A guide to conscious eating - with More Than 75 Recipes Paperback
5. Michael T. Murray M.D. (2012). The Encyclopedia of Natural Medicine Third Edition Paperback

PRE-REQUISITE: CA-112**LEARNING OUTCOMES:**

On the successful completion of the course candidates will be able to:

- Know the fundamentals and master cutting techniques
- Have clean and up to date information of meat handling
- To work in grocery stores, restaurants and food service companies
- Educated about precautionary measures when handling meat
- Health and safety concerns regarding meat and food processing

CONTENTS**Course Introduction & Objectives:**

This course provides individualized and small group instruction in butchery skills. The course focuses on foundational health and safety skills as well as indepth knowledge of butchery techniques. The course will ensure that candidates will be able to work at any professional butchery setup.

Module-1 Fundamentals of Butchery

- Basic facts and fundamentals of meats.
- Understanding of the tools.
- Mastering the different cutting techniques and cuts.

Module -2 Primal cuts

- Beef cutting bascs and beyond
- Primal and sub-primal cuts
- Brisket, shank, plate and inflank
- Exploring ground beef

Module -3 Professional Butchery

- Cutting for profits
- Flavor overview
- Cooking tips
- Cutting for Steaks and roasts

Module -4 Health And Safety

- HACCP
- Injury prevention strategies
- Storing meat after cutting

TEACHING – LEARNING STRATEGIES

- Lecture based examination
- Presentation/seminars
- Class discussion
- Quizzes

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RECOMMENDED TEXT BOOKS/ SUGGESTED READINGS:

1. Castel, P. (1990). *Restaurant butchery: module A: beef and veal: lecturer and student handbook*. Regency College of TAFE, Regency College Hotel School, Regency Park, South Australia.
2. Leigh, M. (2015). *The Ethical Meat Handbook: Complete home butchery, charcuterie and cooking for the conscious omnivore*. New Society Publishers.
3. Underly, K. (2011). *The Art of Beef Cutting: A Meat Professional's Guide to Butchering and Merchandising*. John Wiley & Sons.
4. Schneller, T. (2009). *Kitchen Pro Series: Guide to Meat Identification, Fabrication and Utilization*. Cengage Learning.
5. Barbakoff, A. (2014). *The Gourmet Butcher's Guide to Meat: How To Source It Ethically, Cut It Professionally, and Prepare It Properly*.

PRE-REQUISITE: CA-206**LEARNING OUTCOMES**

On completion of the course the students will be able to:

1. Use research methods to solve problems
2. Evaluate research related problems to determine the base problem and identify alternative solutions.
3. Use qualitative and quantitative methods for analysis.
4. Know the role of research in Tourism Management.
5. Know research concept in a multidisciplinary context.
6. Write reports on the basis of research.

COURSE INTRODUCTION AND OBJECTIVES

The aim of this course is to provide students with the basic tools for planning and conducting simple research projects and reporting on them. It starts with a simple approach on how to plan a research project and implement it by applying the appropriate method in a multidisciplinary context, relevant to tourism.

Module-1: Introduction

- How to choose a topic, objectives, etc.
- Planning a research project and transforming it into a proposal

Module-2: Literature Review

- Deep knowledge of literature review, the research concept in a multidisciplinary context

Module-3: Methodology

- Range of research methods / methodologies, Primary and secondary data
- Sampling and survey, Qualitative and quantitative methods in Research
- Research plans and Proposal, Survey Analysis
- Approaches and dimensions in research

Module-4: Research Report Writing

- Writing a research Report
- Report Formats
- Parts of Report

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RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Veal, A. J. (2021). *Research Methods for Leisure and Tourism* (4th ed.). Prentice Hall.
2. Veal, A. J. (2017). *Research methods for leisure and tourism*. Pearson UK.
3. Vasant, P., & Kalaivanthan, M. (2017). *Handbook of Research on Holistic Optimization Techniques in the Hospitality, Tourism, and Travel Industry (Advances in Hospitality, Tourism, and the Services Industry)*. IGI Global Publishers USA.
4. Faulkner, B. (2006). *Aspects of Tourism: Progressing Tourism Research (First Indian Edition)*.
5. Finn, M., Elliot-White, M., & Walton, M. (2000). *Research Methods for Leisure and Tourism: Data Collection, Analysis and Interpretation*.

PRE-REQUISITE: CA-203**LEARNING OUTCOMES:**

On the successful completion of the course candidates will be able to:

- To understand food ingredients and processing techniques
- To understand food formulation and product development
- To understand the role of micro-organisms and ingredient interaction
- To understand mathematical tools for food formulations
- Health and safety in food formulation

CONTENTS**Course Introduction & Objectives:**

This course provides individualized and small group instruction in food formulation skills. The course focuses on foundational health and safety skills as well as in-depth knowledge of food formulation and gastronomy. The course will ensure that candidates will be able to work professionally in the food industry.

Module-1 Food Formulation

- Introduction of food formulations
- Smart functional ingredient
- Healthy ingredients

Module -2 Processing And Flavor Development

- Impact of processing on ingredients
- Technologies to improve the flavor
- Acceptability of functional food ingredients

Module -3 Development And Control

- Mathematical tools used for recipe formulation
- Process control
- Consumer studies

Module -4 Regulations And Legislations

- HACCP
- Regulations and legislation around tailor-made food products

TEACHING – LEARNING STRATEGIES

- Lecture based examination
- Presentation/seminars
- Class discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS/ SUGGESTED READINGS:

1. Pathania, S., Bhatia, C., & Tiwari, B. K. (2021). Food Formulation and Product Development. *Food Formulation: Novel Ingredients and Processing Techniques*, 1-4.
2. Aramouni, F., & Deschenes, K. (2014). *Methods for developing new food products: An Instructional Guide*. DEStech Publications, Inc.
3. Nielsen, S. S. (2017). *Food analysis laboratory manual*. Springer.
4. Yousef, A. E., & Carlstrom, C. (2003). *Food microbiology: a laboratory manual*. John Wiley & Sons.
5. Potter, N. N., & Hotchkiss, J. H. (2012). *Food science*. Springer Science & Business Media.

PRE-REQUISITE: CA-303**LEARNING OUTCOMES:**

On the successful completion of the course candidates will be able to:

- Know the fundamentals of kitchen gardening
- Ability to plan and manage a kitchen garden
- Develop a familiarity with the basics of gastronomy
- Educated about pest and weed control in organic farming
- Health and safety concerns regarding food

CONTENTS**Course Introduction & Objectives:**

This course provides individualized and small group instruction in kitchen gardens. The course focuses on history of kitchen gardens as well as their practicality in the modern world. The course will ensure that candidates will be able to plan, manage and develop organic farms, and kitchen gardens for high end restaurants.

Module-1 Fundamentals of kitchen gardening

- History of kitchen gardens and modern developments
- Organic produce
- Herbs, salads, fruits and vegetables

Module -2 Planning A Kitchen Garden

- Managing sunlight
- Planting for temperature and weather conditions
- Green houses
- Different types of soils

Module -3 Organic Kitchen Gardens

- Pest control
- Weeding out weeds
- Organic insect control
- Healthy and organic produce

Module -4 Restaurant Kitchen Gardens

- Planting for profits
- Maximizing yield organically
- Plant maintenance, and crop rotation
- Storage of produce

TEACHING – LEARNING STRATEGIES

- Lecture based examination
- Presentation/seminars
- Class discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS/ SUGGESTED READINGS:

1. Bailey, L. H. (1907). *The principles of vegetable gardening*. Macmillan Company.
2. Cincinnati Kitchen Garden Association. (1883). *The Kitchen Garden* (Vol. 1). Cincinnati Kitchen Garden Association.
3. Wilson, C. A. (Ed.). (2010). *The Country House Kitchen Garden 1600-1950*. The History Press.
4. Kale, M. A. (2020). *Vegetable Gardening for Beginners: A Simple, Step-By-Step Guide To Grow Fresh And Organic Vegetables At Home All-Year Round Vertical And Raised Bed Gardening, Indoor Edibles, And Much More*. Mizuna A. Kale.
5. Dabbert, S., Haring, A. M., & Zanoli, R. (2004). *Organic farming: policies and prospects*. Zed Books.
6. Swami, S. (2020). Soil microbes for securing the future of sustainable farming. *Int. J. Curr. Microbiol. Appl. Sci*, 9, 2687-2706.
7. Reijntjes, C., Haverkort, B., & Waters-Bayer, A. (1992). *Farming for the Future*. Macmillan Educ.

PRE-REQUISITE: CA-210**LEARNING OUTCOMES**

- This course emphasizes on the practical aspects of a visit.
- Students will be visiting the real-world hotels/restaurants to gain the real-world experience.
- Details will be submitted in the form of a tour report.

COURSE INTRODUCTION AND OBJECTIVES

Introduction to Tourism and hospitality Field Trip, how to conduct a Tour, Pre-Planning for a tour, organizing a tour, SWOT analysis, PEST analysis, conducting a survey, how to write a report, Presentation skills.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Field Visit	50%	It takes place at any point during the semester
2.	Report Writing	25%	Students must submit their visit report within one week after the field visit.
3.	Viva Voce on Field Report	25%	It takes place after the submission of Field Tour Report.

Fourth Year YEAR, 7th SEMESTER

Code	Course Title	C.H.	Course Type
HQ-07	Translation of Holy Quran	Non Credit	Compulsory
CA-401	Cooking and Catering for Events	2+1	General
CA-402	Inventory and Stock Management	3	Foundation
CA-403	Team Management and Control	3	Foundation
CA-404	International Cuisine and Fusion of Cuisine	2+1	Elective
CA-405	Contemporary Confectionary Art of Desserts	2+1	Elective
CA-406	Act of Barista and Beverages Management	1+1	Major
CA-407	Culinary Arts Field Studies-III	1	Major
Total C.H		18	

PRE-REQUISITE: HQ-06 Translation of Holy Quran**COURSE OUTLINE**

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ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
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CA-401: COOKING AND CATERING FOR EVENTS (THEORY) (02Credit Hrs)

PRE-REQUISITE:

LEARNING OUTCOMES:

- Upon successful completion of this course the students will be able to
- A sound business plan, providing simply stated advice and instructions for a step-by-step approach to success.
- The qualifications necessary to become a successful caterer.
- List their areas of strength and others that might require some development.
- Tools to expand and diversify their existing business to capture a new market and increase revenues.

CONTENT:

Catering, contains some exciting updates and additions, including expanded information on accommodating dietary restrictions, plating and pre scenting food, and banquet execution. Recipes, some with photographs, are also included, along with serving suggestions and considerations.

Module I: INTRODUCTION TO CATERING

- Identify the characteristics needed to succeed in the catering segment
- How to assess the feasibility of a business idea and/or proposal.
- Several specific areas of catering are identified, along with the benefits and challenges of managing each.

Module II: STARTING YOUR CATERING BUSINESS

- Guidance regarding choosing the best location for a catering business
- The necessary requirements for a successful and compliant start-up.
- The flow of goods is also addressed, giving the reader a realistic overview of the elective areas to resource prior to opening for business.

Module III: PRICING FOR PROFIT

- The tools for optimizing profit margins after considering and projecting labor costs, food, and beverage costs, along with other variable and fixed operational expenses.
- Other subjects addressed here are the availability of products in the marketplace, portioning, and other pricing considerations.
- Plating and presentation are also discussed as ways to upsell menu items and increase the potential customer's perception of value.

Module IV: SETTING UP THE CATERING KITCHEN

- The catering kitchen layout, essential equipment for preparation
- Transportation and event execution
- Employee training and safety guidelines.
- Some specialized equipment helpful in managing dietary restrictions is also covered.

Module V: STAFFING

- Employees are a caterer's most valuable resource and must be selected, trained, and cultivated effectively.
- Tools for effective recruitment, documentation, training, evaluating, and terminating staff.

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

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- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Lonely Planet –(2016). Western USA by Amy C Balfour, Sandra Bao, Sara Benson, Becky Ohlsen & Greg Ward.
2. Lonely Planet - (2017). Lonely Planet – Western Europe

CA-401: COOKING AND CATERING FOR EVENTS (PRACTICAL) (01Credit Hr)

PRE-REQUISITE:

LEARNING OUTCOMES:

- Upon successful completion of this course the students will be able to
- A sound business plan, providing simply stated advice and instructions for a step-by-step approach to success.
- The qualifications necessary to become a successful caterer.
- List their areas of strength and others that might require some development.
- Tools to expand and diversify their existing business to capture a new market and increase revenues.

CONTENT:

Catering, contains some exciting updates and additions, including expanded information on accommodating dietary restrictions, plating and pre scenting food, and banquet execution. Recipes, some with photographs, are also included, along with serving suggestions and considerations.

Module I: FOOD PREPATION FOR CATERING

- Practically preparation food items to supply on an event in your own commercial kitchen
- Practically preparation food on the site of catering.
- Live Station of preparing food

Module II: FOOD DISPLAY AND DECORATION:

- Guidance regarding choosing the best location for a food stall
- Decoration of cutlery and food item

Module III: FOOD SERVING

- Managing team for serving food

Module IV: FOOD WASTE MANAGEMENT:

- The catering kitchen layout, essential equipment for preparation.

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- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Lonely Planet –(2016). Western USA by Amy C Balfour, Sandra Bao, Sara Benson, Becky Ohlsen & Greg Ward.
2. Lonely Planet - (2017). Lonely Planet – Western Europe

PRE-REQUISITE:**LEARNING OUTCOMES:**

- Upon successful completion of this course the students will be able to
- Recent macroeconomic trends in inventory and logistics costs,
- Changes affect operations and corporate strategy.
- Just-in-Time and short-range production scheduling
- Collaboration and coordination within a firm through processes such as sales and operations planning,
- external collaboration through initiatives such as collaborative planning, forecasting and replenishment, and vendor managed inventory

CONTENT:

Advances in information technology have made it easier for firms to exchange information with their trading partners. Indeed, much of the academic and practitioner literature on supply chain management has focused on how firms can collaborate and share information to reduce costs in their shared supply chains. Minor Electively speaking, these initiatives have had a positive economic impact. As discussed in Chapter 1, inventory as a percent of sales, and logistics costs as a percent of gross domestic product, have been consistently declining. Our opinion is that these savings are just the tip of the iceberg. It is now commonplace for an employee in an inventory or manufacturing planning role to (a) have powerful tools on their personal computer, and (b) have access to demand and supply-related data.

Module I: The Importance of Inventory Management and Production Planning and Scheduling

- Why Aggregate Inventory Investment Fluctuates: The Business Cycle
- Corporate Strategy and the Role of Top Management.....
- The Relationship of Finance and Marketing to Inventory Management and Production Planning and Scheduling...
- Finance
- Marketing
- Operations Strategy
- Mission
- Objectives
- Management Levers
- Minor Elective Comments....
- Measures of Effectiveness for Inventory Management and Production
- Planning and Scheduling Decisions

Module II: Frameworks for Inventory Management and Production Planning and Scheduling

- The Diversity of Stock-Keeping Units
- The Bounded Rationality of a Human Being.
- Decision Aids for Managing Diverse Individual Items
- Conceptual Aids
- Physical Aids
- Frameworks for Inventory Management
- Functional Classifications of Inventories.

- The A-B-C Classification as a Basis for Designing Individual Item
- Decision Models.

Module III: Forecasting Models and Techniques

- The Components of Time-Series Analysis.
- The Three Steps Involved in Statistically Forecasting a Time Series.
- Some Aggregate Medium-Range Forecasting Methods
- Regression Procedures.
- Individual-Item, Short-Term Forecasting: Models and Procedures
- The Simple Moving Average
- Simple Exponential Smoothing
- Exponential Smoothing for a Trend Model. 3.4.4 Winters Exponential Smoothing Procedure for a Seasonal Model
- Selection of Smoothing Constants
- Measuring the Performance of a Forecasting Process
- Measures of Forecast Accuracy
- Estimating the Standard Deviation of Forecast Errors over a Lead Time

Module IV: Order Quantities When Demand Is Approximately Level

- Assumptions Leading to the Basic EOQ
- Derivation of the EOQ
- Numerical Illustration
- Sensitivity Analysis.
- Implementation Aids
- Numerical Illustration
- Quantity Discounts
- Numerical Illustrations
- Price Established Independent of Ordering Policy. 4.6.2 Price Set as a Fixed Fractional Markup on Unit Variable Cost

Module V: Lot Sizing for Individual Items with Time-Varying Demand

- The Complexity of Time-Varying Demand
- The Choice of Approaches
- Minor Elective Assumptions and a Numerical Example
- The Wagner-Whitin Method: An "Optimal" Solution under an Additional Assumption
- Potential Drawbacks of the Algorithm Heuristic Approaches for a Significantly Variable Demand Pattern

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- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Demand-Driven Inventory Optimization and Replenishment: Creating a More Efficient Supply Chain Robert A. Davis (2016)
2. Retail Analytics: Integrated Forecasting and Inventory Management for Perishable (2015)
3. CRC Press - The SAP Materials Management Handbook, Ashfaque Ahmed (2014)
4. Retail Analytics: Integrated Forecasting and Inventory Management for Perishable, Muller & Max (2011)

PRE-REQUISITE:**LEARNING OUTCOMES:**

- Upon successful completion of this course the students will be able to Systematic processes in organizations that are deliberately designed to facilitate cooperation and goal achievement.
- Systematic and continuous, rather than ad hoc and incidental, control efforts.
- The three types of control practices also highlight the important message of this book that management control systems are about so much more than performance measurement and incentives.
- Need to use a broad conception of what a management control system is.
- Holistic and systematic view on creating organizational performance.

CONTENT:

All types of organization are essentially groups of people interacting with one another. These people typically work at various levels and functions within the organization, perform various tasks and apply their various skills. A central question for all organizations is how to align managers' and employees' behavior with the organization's mission, goals and strategies. Here management control systems, the focus of this book, play a key role. We define a management control system as comprising a combination of control practices designed and implemented by top managers to increase the probability that lower level managers and employees will behave in ways consistent with the organization's mission, goals and strategies. These control practices can take many forms, such as budgets, mission statements, and transfer pricing arrangements, codes of conduct, performance measures and reward systems

Module I: Introduction to management control system

- Introduction
- Top-down and bottom-up roles of 'package' - input, throughput and output controls
- Enabling and coercive management

Module II: Mission, goals and strategies

- Introduction
- The stakeholder view
- Mission
- Different types of organizational goal Strategy
- Contingencies

Module III: Managers, human behavior and organizations Introduction

- Introduction
- Models of Human Behavior
- The Management Control System model of human behavior

Module IV: Responsibility Centers

- Introduction
- Responsibility Centers
- Revenue Centers

- Expense Centers
- Profit and Investments Centers

Module V: Control with Transfer prices and shared service centers

- Introduction
- Transfer pricing
- Transfer pricing methods
- Administration of transfer prices
- Corporate services
- Shared service centers
- Management control system challenges arising from interdependent responsibility centers

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- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. The task and role of management team in the control and management (2015)
2. Joseph Heagney - Fundamentals of Project Management, 4th Edition (Worksmart) (2011)
3. Chris Lytle - The Accidental Sales Manager. How to Take Control and Lead Your Sales Team to Record Profits (2011)

CA-404: INTERNATIONAL CUISINE AND FUSION OF CUISINE (03 Credit hrs)

PRE-REQUISITE:

LEARNING OUTCOMES:

- Upon successful completion of this course the students will be able to
- Explore the different cultures and cuisines of the world.
- Type of international cuisine course
- Wide cuisine range of regions around the world
- History, geography, and religion-not to mention the ingredients influence the different cuisines.

CONTENT:

The idea for International Cuisine seemed natural and obvious in light of the importance of increased globalization. At the same time, The International Culinary School at The Art Institutes went through an extensive review process that emphasizes an international focus. The most compelling concept, explored with industry professionals, current students, our faculty, and prospective students, centered on teaching students about a wide variety of countries and regions, cultures, and ingredients and the crucial role they play in a variety of cuisines. Industry professionals acknowledge that while fundamental skills are still most critical, it is important for culinary students to have exposure to a wide range of cultural, sociological, and geographical information because the marketplace is demanding it. Due to changing demographics and evolving tastes of consumers, restaurateurs are under increasing pressure to offer more diverse and/or creative menus. Culinary students who have had a broader exposure to a variety of international cuisines will be more versatile and creative culinarians.

Module I: Cuisines of the Middle East

- Objectives
- Introduction
- Historic Culinary Influences
- Unique Components
- Significant Sub regions
- Recipes

Module II: Greek Cuisine

- Objectives
- Introduction
- Historic Culinary Influences
- Unique Components
- Significant Sub regions
- Recipes

Module III: Eastern European Cuisine

- Objectives
- Introduction
- Historic Culinary Influences
- Unique Components
- Significant Sub regions
- Recipes

Module IV Italian Cuisine

- Objectives
- Introduction
- Historic Culinary Influences
- Unique Components
- Significant Sub regions
- Recipes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Ann Vinod - Fusion cuisine - INDSPIRED - Indian inspired (2019)
2. Joni Marie Newman - Fusion Food in the Vegan Kitchen 125 Comfort Food Classics, Reinvented with an Ethnic Twist! (2013)
3. Chat Mingkwan - Asian Fusion (2010)
4. Michael F. Nenes & Joe Robbins -International Cuisine (2008)

PRE-REQUISITE:

LEARNING OUTCOMES:

- Upon successful completion of this course the students will be able to
- New product development and product reformulations have been implemented globally by food processors to develop novel foods.
- Food formulation is perhaps one of the most important components in new product development process and application of a new technology in food manufacturing business.
- Novel and healthy ingredients, along with increasing requirement of novel processing techniques for clean label food products
- Regulations and legislation to their use, is the premise of this book Food Formulation:
- Novel Ingredients and 7 Processing Techniques:

CONTENT:

This book addresses three main areas of significant relevance to food formulation strategies required for food and nutraceutical sectors, namely: (i) Ingredients: This section covers the basis of a food formulation, i.e. ingredients. These chapters discuss the smart and functional ingredients from plant and animal sources, healthy ingredients such as salt, sugar and phosphate replacers, bio actives and peptides, macronutrient and micronutrient ingredient interactions. (ii) Processing techniques: This section includes the relevance and application of novel emerging technologies in processing of new food formulations. New techniques such as 3D printing, Encapsulation and combination techniques have been discussed to improve the flavor and acceptability of functional food ingredients. Recent developments in greener technologies are discussed with emphasis on operational principles and inherent strengths and weaknesses of the technologies from food formulation viewpoint. (iii) New trends in food formulation: This section covers tailored food formulations for targeted populations, food targeting allergies and intolerance (gluten-free, lactose-free products).

Module I Professionalism and Food Safety

- Bakers, chefs and restaurants
- Bakeshop operations
- The professional pastry chef and baker
- Safety and sanitation

Module II Tools and Equipment for the Bakeshop

- Standards for tools and equipment
- Knives
- Hand tools
- Measuring and portioning devices
- Strainers and sieves

Module III Bakeshop Ingredients

- Flours
- Sugar and sweeteners
- Fats
- Milk and dairy products
- Eggs

- Fruits
- Flavorings

Module IV Mise En Place

- Formulas and recipes
- Converting formulas
- Knife skills
- Preparing equipment
- Preparing ingredients

Module V Principles of Baking

- Mixing methods and techniques
- Heat transfer and the science of baking
- Baking and cooking methods 124
- The baking process and the stages of baking
- Flavor and taste
- Flavoring food in the bakeshop

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- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
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3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Celine Steen & Tamasin Noyes-The Great Vegan Protein Book: Fill Up the Healthy Way with More than 100 Delicious Protein (2015)
2. Wiley-Blackwell - Dairy Ingredients for Food Processing (2011)
3. The Illustrated Cook's Book of Ingredients (2010)

CA-406: ACT OF BARISTA AND BEVERAGES MANAGEMENT(01+01)Credit hrs)

PRE-REQUISITE:

LEARNING OUTCOMES:

- Upon successful completion of this course the students will be able to
- Food and beverage service operations,
- Catering services, restaurant services, room services, food services,
- Menus, alcoholic/non-alcoholic beverages, tobacco products,
- Sales and revenue control systems
- Food production operations, including kitchen management,
- Basic commodities, nutrition, hygiene and safety.

CONTENT:

Food and Beverage Services is a comprehensive textbook that covers all the aspects of food and beverage department starting from understanding of the industry, organization of the department, menu served, various service procedures, managing cordial relations with customers, along with environmental concerns. The illustration of concepts with the help of photographs, charts, layouts, activities and side notes make the book user-friendly. The book contains 48 chapters, divided under six sections- Introduction to F & B Service, Menu knowledge and Planning, Food Service, Beverages and Tobacco, Cellar and Bar Operations, and Ancillary Functions. The first section begins with an introduction to the industry and includes discussion on equipment's used and types of service. It is followed by a section on menu knowledge and planning. Food Service includes the methods and procedures of service as well as how to take orders and process the bills. The section on Beverages includes both alcoholic and non-alcoholic beverages, their service and preparations. Cellar and Bar Operations elucidates the service operations in a cellar and a bar, their staff and control procedures. The last section is Ancillary Functions which discusses function catering, supervisory functions, customer relations, food safety among other topics.

Module I Introduction to Bar Management

- Origin
- History
- Fermented
- Beverages
- Distilled Beverages
- Duties and Responsibilities of a Bar Manager
- Duties and Responsibilities of a Bartender
- Overview of the Bar Service Organizational Chart

Module II Managing Bar Operations

- Management Functions
- Planning
- Organizing
- Controlling
- Managing the Six M's
- Job title and Job Description
- Menu Format
- Serving Policy
- Equipment Stock

Module III Glassware

- Four basic styles of glassware
- Glassware terminologies
- Beverage/Bar equipment
- Basic Drink Mixing Procedures

Module IV Beverages

- Definitions of beverage
- Types of beverages
- Non –Alcoholic
- Alcoholic
- Beers
- Wines
- Liquors
- Other Spirits
- Bar Laboratory
- 40 International Alcoholic Cocktails
- Wine and Beverage Service Procedures/Techniques

Module V Cocktails and Non-Alcoholic Beverages

- Overview of about cocktails and Non-Alcoholic beverages
- Etymology
- Fundamentals of Mixed Drinks
- Methods of Preparation
- Recipes
- Glassware
- Basic Mixing Rules
- Compositions of a Good Cocktail
- Base
- Modifiers or Aromatized
- Additives / Coloring Agent
- Garnish
- Decoration
- Trade Secrets
- Bar Terms (definition of terms)
- Different types of liquor in a bar should stock
- Bartender
- Standard Garnish Presentation

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after mid term assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Food and Restaurant Management (2016)
2. John Cousins - Food and Beverage Service, 9th Edition (2014)
3. Food and Beverage Service & Accommodation Operations Food (2013)
4. John Cousins & Dennis Lillicrap & Suzanne Weekes - Food and Beverage Service (2010)

PRE-REQUISITE: CA-313**LEARNING OUTCOMES**

- This course emphasizes on the practical aspects of a visit.
- Students will be visiting the real-world hotels/restaurants to gain the real-world experience.
- Details will be submitted in the form of a tour report.

COURSE INTRODUCTION AND OBJECTIVES

Introduction to Tourism and hospitality Field Trip, how to conduct a Tour, Pre-Planning for a tour, organizing a tour, SWOT analysis, PEST analysis, conducting a survey, how to write a report, Presentation skills.

TEACHING – LEARNING STRATEGIES

- Lecture Based Examination
- Presentation/ Seminars
- Class Discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- Classroom Participation
- Attendance, Assignments, and Presentation
- Homework
- Attitude and Behavior
- Hands-on-Activities
- Short Tests, Quizzes etc.

ASSESSMENT AND EXAMINATIONS:

Sr. No.	Elements	Weightage	Details
1.	Field Visit	50%	It takes place at any point during the semester
2.	Report Writing	25%	Students must submit their visit report within one week after the field visit.
3.	Viva Voce on Field Report	25%	It takes place after the submission of Field Tour Report.

Fourth Year YEAR, 8th SEMESTER

Code	Course Title	C.H.	Course Type
HQ-08	Translation of Holy Quran	01	Compulsory
CA-408	Food Waste Management	03	Elective
CA-409	Modern Trends and Food Habits	03	Elective
CA-410	Food Operations in Modern Technologies	03	Foundation
CA-411	Thesis	06	Major
Total C.H		15	

PRE-REQUISITE: HQ-07

COURSE OUTLINE

سورة الذريات تا سورة الناس

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

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PRE-REQUISITE: CA-402**LEARNING OUTCOMES:**

- Upon successful completion of this course the students will be able to
- Environmental management systems: applications and potential
- Environmental legislation
- Waste treatment methodologies
- Waste treatment methodologies of foods of plant origin
- Waste treatment methodologies of foods of animal origin Part 6: Food packaging waste treatment.

CONTENT:

The continuously increasing human population (more than 7 billion) has resulted in a huge demand for processed and packaged food. Food processing and food packaging have led to a substantial depletion of non-renewable resources. In fact, large amounts of water, air, electricity and fuel are consumed on a daily basis for food processing, transportation and preservation purposes. Apart from this, however, the lack of implementing a life cycle analysis (LCA), where all by-products or sub-products of food processing could effectively enter the Krebs cycle, is an omnipresent reality. Despite the agreements stipulated in the Montreal and Kyoto protocols and what was voted within the frame of the Green and White Bible, the truth is that the environment shows a rapidly declining trend. Although the food industry is not one of the most heavily polluting, it contributes to a considerable extent to this already acute problem. Promising solutions consist of opting for 'green' processing technologies (implying zero/low consumption of nonrenewable resources) in conjunction with usage of by-products and/or waste materials. Another very important issue is food packaging materials which account for almost 5% of the total weight (15% of the total volume) of waste materials. Most of it is manufactured out of polymeric material (plastic). Recycling is a promising solution to this problem, but composting, landfilling and, occasionally, incineration are most widely employed processes. This book consists of 15 chapters, divided into the following parts:

Module I: Potential and Representatives for Application of Environmental

- Management System (EMS) to Food Industries
- Current state of Environmental Management System (EMS) implementation
- Emissions and waste water management
- Food industry and agricultural waste
- Beverage industry
- Fruit and vegetable industry
- Meat and poultry
- Agricultural waste
- Effects of pollution on organisms
- Glass, chemicals and other products
- Environmental attitudes and politics

Module II: A Promising New System for Environmental Management or Just another Illusion?

- Introduction of ISO 14000
- The emergence of global environmental awareness.
- Technical Committee 207 (TC 207)

- Environmental management systems (EMS) Benefits of implementing ISO 14000
- ISO 14000: a new approach ISO 14001: what it is and what it is not
- Similarity of ISO 14000 to other programs
- Applications of ISO 14000
- ISO 14000 and banks
- ISO 14000 and governments/education ISO 14001 implementation
- ISO 14010 Environmental auditing
- Brief presentation of new ISO 14001:2004 Overview of case studies reported on implementation of ISO 14001

Module III: ISO 14040: Life Cycle Assessment (LCA) Principles and Guidelines

- The structure of LCA
- Examples of LCA studies on food production systems LCA case studies reported
- LCA in the future

Module IV: Presentation and Comments on EU Legislation Related to Food Industries - Environment Interactions

- Introduction
- Topics/categories covered under EU legislation

Module V: Presentation and Comments on USA and Canada Legislation

- Introduction
- US legislation for environment
- Canadian legislation for environment

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

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- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

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RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Eleftherios Iakovou & Dionysis Bochtis & Dimitrios Vlachos & Dimitrios Aidonis - Supply Chain Management for Sustainable Food Networks (2016)
2. Walter Leal Filho & Marina Kovaleva - Food Waste and Sustainable Food Waste Management in the Baltic Sea Region (2015)
3. Sina Ebnesajjad - Plastic Films in Food Packaging: Materials, Technology and Applications (2013)
4. Ioannis S. Arvanitoyannis - Waste Management for the Food Industries (Food Science and Technology) (Food Science and Technology) (2007)

PRE-REQUISITE: CA-205**LEARNING OUTCOMES:**

- Upon successful completion of this course the students will be able to
- Contribute to the health and wellness of employees.
- Set a positive example for employees, stakeholders, community members, and other employers.
- Increase the availability of healthier foods from suppliers to meet new consumer demand.
- Strengthen local food systems.
- Build awareness and support among decision makers, budget managers, and purchasing staff for healthier food and beverage options

CONTENT:

The purpose of this course is to help you implement food service guidelines in your government work site or other public facility to increase the availability of healthier choices at food service venues, including cafeterias, concession stands, snack bars, and vending machines. The Centers for Disease Control and Prevention recommends using the Food Service Guidelines for Federal Facilities (Food Service Guidelines) from the US Department of Health and Human Services (HHS) and eight other federal departments and agencies, but the action steps in this document are applicable to any food service guideline. The Food Service Guidelines include specific food and nutrition standards that are based on the most current Dietary Guidelines for Americans and sustainability standards for food and food service operations.

Module I: INTRODUCTION

- Framing Food Law
- Principles of Food Law
- Institutions of Food

Module II: CONSTITUTIONAL AND ADMINISTRATIVE LAW

- The Constitutional Law of Food
- The Administrative Law of Food

Module III: ECONOMIC ADULTERATION AND EARLY FOOD LAW

- Introduction
- 1906 Pure Food and Drug Act
- Food Products Liability

Module IV: MARKETING AND LABELING

- Introduction
- Food Labeling
- Food Advertising
- Food Marketing Litigation

Module V: NUTRITION

- Anti-Hunger Law
- Promoting Healthy Food and Discouraging Unhealthy Food
- Healthy Food Access and Affordability Healthy Food Financing Initiative

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RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Daniel James Chee - Provide Food and Beverage Services (2013)
2. Benjamin K. Simpson - Food Biochemistry and Food Processing (2012)
3. John Cousins & Dennis Lillicrap & Suzanne Weekes - Food and Beverage Service (2010)

CA-410: FOOD OPERATIONS IN MODERN TECHNOLOGY (03 Credit Hrs)

PRE-REQUISITE: CA-404

LEARNING OUTCOMES:

- Upon successful completion of this course the students will be able to
- Heat has important influences on food processing in a number of respects:
- Most convenient way of extending the shelf life of foods by destroying enzymes and microbiological activity, or by removing water to inhibit deterioration
- Unit operations that take place at ambient temperature and involve minimum heating of foods:
- Operations that heat foods to extend the shelf life or to alter the eating quality
- Remove heat from foods to extend the shelf life with minimal changes in nutritional qualities and sensory characteristics; the final part
- Operations that are integral to a food process but are supplementary to the main method of processing.
- Formulae required for calculation of processing parameters and sample problems

CONTENT:

The aims of the food industry today, as in the past, are fourfold: To extend the period during which a food remains wholesome (the shelf life) by preservation techniques which inhibit microbiological or biochemical changes and thus allow time for distribution, sales and home storage. To increase variety in the diet by providing a range of attractive flavors, colors, aromas and textures in food (collectively known as eating quality, sensory characteristics or organoleptic quality); a related aim is to change the form of the food to allow further processing (for example the milling of grains to flour). To provide the nutrients required for health (termed nutritional quality of a food). To generate income for the manufacturing company.

Module I: Properties of foods and processing theory

- Properties of liquids, solids and gases
- Density and specific gravity
- Viscosity
- Rheology and texture
- Fluid flow through fluidized beds
- Heat transfer & Mechanisms
- Sources of heat and methods of application to foods
- Effect of heat on nutritional and sensory characteristics

Module II: Process control

- Automatic control
- Sensors
- Controllers
- Computer-based systems
- Programmable logic controllers (PLCs)
- Types of control systems 2.2.3 Software developments
- Neural networks

Module III: Raw material preparation

- Cleaning
- Wet cleaning
- Dry cleaning
- Removing contaminants and foreign bodies
- Sorting
- Color sorting

- Shape and size sorting
- Weight

Module IV: Size reduction

- Size reduction in liquid foods (emulsification and homogenization)
- Theory
- Equipment
- Effect on foods

Module V: Mixing and forming

- Mixing
- Theory of solids mixing
- Theory of liquids mixing
- Equipment
- Effect on foods
- Forming
- Bread moulders
- Pie and biscuit formers
- Confectionery moulders

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RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

1. Theodoros Varzakas & Constantina Tzia - Food Engineering Handbook, Two Volume Set: Food Engineering Handbook: Food Process Engineering (2014)
2. Food Science and Technology (2010)
3. James M. Jay - Modern Food Microbiology 7th Ed - College of Science and Technology (2008)
4. Zeki Berk - Food Process Engineering and Technology (2008)

PRE-REQUISITE: CA-206

SYLLABUS OUTLINE

Research work includes original research work, data collection, data analysis and compilation in the form of thesis.

MODULE AIM

To acquaint the students with the practical understanding of research and thesis writing according to the proper format.

LEARNING OUTCOMES

Students will be trained to carry out and conduct extensive research work, process and analyze the data and present it in the form of thesis.

Assessment Strategies

- Quality of Thesis
- Viva Voce Examination

Distribution of Marks

- Thesis and viva voce: 100%

RECOMMENDED TEXT BOOKS & SUGGESTED READINGS:

As suggested by the supervisor