

PRE-REQUISITE

THM-209 Culinary Arts

LEARNING OUTCOMES

A graduate of this major should be able to:

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

COURSE INTRODUCTION AND OBJECTIVES

Preparing students to be baking and pastry professionals through hands-on experience and the development of competency based skills while emphasizing management and creativity.

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
- Sugar and Milk - Properties and Role of milk and Sugar in Bakery

Module3:**Leavening agents**

- What are leavening agents? - Different Leavening agents - their functions in Baking Industry

Module4:**Setting materials - types - their function in baking**

- Cocoa and Chocolate, Bakery unit operations including mixing - fermentation - Proofing - baking.

Module5:**Biscuits**

- Ingredients - Types of biscuits - Processing of biscuits - faults & Remedies
- Cream crackers, soda crackers, wafer biscuits & matzos, puff biscuits

- Hard sweet, Semi Sweet and Garibaldi fruit sandwich biscuit
- Short dough biscuits, Wafers

Module 6:

Cakes - types

- Ingredients - Processing of cakes - Problems - Remedies
- Pizza and pastries - their ingredients and Processing

Module 7

Setting up of a Bakery Unit

- Bakery equipment required - types - Selection – Maintenance - Bakery norms and Standards

Module 8

Basic technical considerations of confectionery

- Types of confectionery
- TSS, pH, Acidity and ERH - Quality and standards/Regulations to be followed in the Bakery Industry and packaging requirements
- Quality and standards/regulations to be followed in the confectionery Industry and packaging requirements

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 TEXT BOOKS & SUGGESTED READINGS:

1. Marilyn M., (2016). A Beginners Guide to Baking Bread. The Urban Homemaker.
2. Friberg, B. (2014). *professional pastry chef*. Van Nostrand Reinhold Co
3. E. Miller., (2014). Enjoy Yeast Breads. Utah State University Extension. USU.

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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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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.