



## COURSE OUTLINE: FDS142 - BAKE THEORY

Prepared: Sarah Birkenhauer

Approved: Sherri Smith, Chair, Natural Environment, Business, Design and Culinary

<b>Course Code: Title</b>	FDS142: BAKE THEORY
<b>Program Number: Name</b>	1071: CULINARY SKILLS 2078: CULINARY MANAGEMENT
<b>Department:</b>	CULINARY/HOSPITALITY
<b>Semesters/Terms:</b>	19F
<b>Course Description:</b>	This course will provide the student with an understanding of the requirements and skills for the baking industry, hotels, restaurants, and bakeries. Familiarity with techniques and products will help assist in your future purchasing decisions.
<b>Total Credits:</b>	2
<b>Hours/Week:</b>	1
<b>Total Hours:</b>	15
<b>Prerequisites:</b>	There are no pre-requisites for this course.
<b>Corequisites:</b>	There are no co-requisites for this course.
<b>This course is a pre-requisite for:</b>	FDS162
<b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>	<p><b>1071 - CULINARY SKILLS</b></p> <p>VLO 2    apply basic food and bake science to food preparation to create a desired end product.</p> <p><b>2078 - CULINARY MANAGEMENT</b></p> <p>VLO 2    apply basic and advanced food and bake science to food preparation to create a desired end product.</p>
<b>Essential Employability Skills (EES) addressed in this course:</b>	<p>EES 1    Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</p> <p>EES 2    Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 3    Execute mathematical operations accurately.</p> <p>EES 4    Apply a systematic approach to solve problems.</p> <p>EES 10    Manage the use of time and other resources to complete projects.</p> <p>EES 11    Take responsibility for ones own actions, decisions, and consequences.</p>
<b>General Education Themes:</b>	Science and Technology
<b>Course Evaluation:</b>	Passing Grade: 50%, D
<b>Books and Required Resources:</b>	Professional Baking by Wayne Gisslen Publisher: Wiley Edition: 7th



SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554

ISBN: 9781119148449  
handouts

Student Study Guide by Wayne Gisslen  
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**Course Outcomes and Learning Objectives:**

<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>
1. Explain the product types and production methods used in baking.	1.1 Describe the role and function of the bakery. 1.2 Identify types of finished baked products. 1.3 Differentiate between baked products and pastry. 1.4 Identify ingredients used in baking. 1.5 Describe mixing methods and principles. 1.6 Describe general production methods used in baking. 1.7 Describe storage procedures for finished bake products.
<b>Course Outcome 2</b>	<b>Learning Objectives for Course Outcome 2</b>
2. Describe properties of flour, application and storage.	2.1 Identify parts of the wheat berry: bran, germ and endosperm 2.2 Classify types of flour. 2.3 Describe the use of flour in the production of baked products. 2.4 Describe various components of flour, such as moisture, protein content, fat, minerals, enzyme, fiber and ash effect and their effect on the performance of flour. 2.5 Identify how to store flour.
<b>Course Outcome 3</b>	<b>Learning Objectives for Course Outcome 3</b>
3. Describe properties of fat, application and storage.	3.1 Identify types of fat, including shortening, margarine, lard, butter and oils. 3.2 Describe the properties of fat. 3.3 Discuss the applications of fat as an ingredient. 2.4 Describe the safe food handling and storage of fats.
<b>Course Outcome 4</b>	<b>Learning Objectives for Course Outcome 4</b>
4. Explain properties of sugar, application and storage.	4.1 Identify types of sugar including, refined sugar, honey, syrups, molasses, glucose, corn syrup, natural and artificial sweeteners. 4.2 Identify the applications of natural and artificial sweeteners. 4.3 Differentiate between simple, complex and inverted sugars including sucrose, fructose, lactulose, maltose and galactose. 4.4 Describe the storage procedures for sugar.
<b>Course Outcome 5</b>	<b>Learning Objectives for Course Outcome 5</b>
5. Explain the properties of egg application and storage, and describe how eggs are applied as an ingredient in the baking.	5.1 Identify types, grades and sizes of eggs. 5.2 Identify purchase forms of eggs including fresh, whole, dried and frozen. 5.3 Identify the safe food handling and storage of eggs. 5.4 Identify the purpose of utilizing eggs in baking, such as leavening, moisture. 5.5 Identify techniques of egg preparation such as egg foaming, meringue.
<b>Course Outcome 6</b>	<b>Learning Objectives for Course Outcome 6</b>



	6. Describe how dairy products are applied as a functional ingredient in baking.	6.1 Explain how milk is produced, graded, packaged and sourced. 6.2 Identify the different kinds of milk homogenized, evaporated, condensed and dried. 6.3 Identify the purpose of dairy products in baking, such as adding moisture, richness etc. 6.4 Identify types of dairy products including yogurt, butter, sour cream, kefir and whey powder. 6.5 Identify the safe food handling and storage of dairy products.
	<b>Course Outcome 7</b>	<b>Learning Objectives for Course Outcome 7</b>
	7. Explain properties of salt, application and storage.	7.1 Identify the origins, types and forms of salt. 7.2 Identify the applications of salt as a functional ingredient in baking. 7.3 State the shelf life and storage of salt.
	<b>Course Outcome 8</b>	<b>Learning Objectives for Course Outcome 8</b>
	8. Explain the properties of leavening agents, application and storage.	8.1 Identify a variety of chemical and natural leaveners. 8.2 Describe the functional application of chemical and natural leaveners. 8.3 Define creaming/foaming preparation methods. 8.4 Identify types of yeast. 8.5 Identify the applications of yeast as an ingredient. 8.6 Define fermentation.
	<b>Course Outcome 9</b>	<b>Learning Objectives for Course Outcome 9</b>
	9. Explain the applications of chocolate as an ingredient in baking.	9.1 Identify the origins, types, percentage of cocoa and purchase forms of chocolate. 9.2 Describe the production of chocolate. 9.3 State the steps in tempering chocolate. 9.4 Describe the handling and storage procedure for chocolate.

**Evaluation Process and Grading System:**

<b>Evaluation Type</b>	<b>Evaluation Weight</b>
Assignments	20%
Final Assessment	30%
Test #1	25%
Test #2	25%

**Date:** July 26, 2019

**Addendum:** Please refer to the course outline addendum on the Learning Management System for further information.