

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

Sault Ste. Marie, Ontario

COURSE OUTLINE

COURSE TITLE: *BAKE THEORY & DEMONSTRATION*

CODE NO. *FDS135*

SEMESTER: *One*

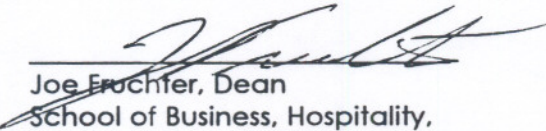
PROGRAM: *Chef Training*

AUTHOR: *Rex Leeson*

DATE: *September, 1997*

PREVIOUS OUTLINE DATED: *September, 1996*

APPROVED:


Joe Fruchter, Dean
School of Business, Hospitality,
Natural Resources & Computer Studies

DATE:

Aug 21/97

TOTAL CREDITS: _____

PREREQUISITES: _____

LENGTH OF COURSE: _____

TOTAL CREDIT HOURS: _____

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COURSE NAME

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OVERALL OBJECTIVE:

To provide the student with an understanding of the requirements and skills for the baking industry, hotel, restaurant, and bakeries.

UNIT 1 - FLOUR PRODUCTION AND APPLICATION:

Identify the botanical classification of wheat and rye.

- List the plants used in production of flour

Identify the classes and varieties of wheat and rye.

- Provide background information on flours

Identify the parts of wheat berry.

- Describe - bran
 - germ
 - endosperm
 - describe the relationship of these parts

Define flour specifications and compositions.

- State the constituents of wheat flour:
 - moisture
 - starch
 - protein
 - fat
 - minerals
 - enzymes
 - fibre
 - ash

UNIT II - FLOUR PRODUCTION AND APPLICATION:

State when to use:

- hard wheat flour
- high protein flour
- low protein flour
- whole wheat flour
- rye flour
- light rye flour
- medium rye flour
- dark rye flour
- soft flour
- regular cake flour
- pastry flour
- corn flour - white, yellow
- cornstarch
- high ratio cake flour

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State proper storage conditions for flour(s).

List temperature, relative humidity (perishable ingredients):

- temperature of flour
- effect on performance
- moisture of flour
- effect on performance period for flours

Describe peak performance period for flours.

State shelf life under proper storage conditions.

UNIT III - TYPES OF SHORTENINGS:

List and identify the different types of shortening:

- all purpose shortening
- high ratio (emulsified)
- margarine
- lard
- butter
- oil
- blended
- animal shortening
- vegetable shortening

State the basic components of each shortening.

State the basic chemical and physical reactions of each shortening.

UNIT IV - SUGAR COMMODITIES:

List and identify different raw sugars.

- state their places of origin

List and identify the different types of refined sugar.

- describe the different types and grades of refined sugar
- state the use of each

List the uses of honey, syrup, molasses and glucose.

- state the type of each
- state the use of each

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UNIT V: EGGS IN BAKING:

List the uses of eggs.

Identify the different forms of eggs:

- fresh
- whole
- dried
- frozen; whole, separated

Describe the handling and storage of eggs.

- describe the safe, sanitary handling of eggs
- state the correct temperature and optimum conditions for storage of eggs

UNIT VI: DAIRY PRODUCTS:

List the uses of cream.

Identify the different kinds of cream.

- 35% - 40%
- 18%
- 10%

- state the physical properties of each

List the uses of milk.

- identify the different kinds of milk:
 - homogenized
 - fortified
 - skimmed
 - buttermilk

- state the recipe use of each

- state the physical properties of each

- recognize the different forms of milk:
 - evaporated
 - condensed
 - dried

List the uses of cream and milk products.

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- identify cream and milk by-products:
 - skimmed milk powder
 - whey powder
 - baker's cheese

- state the recipe use of each

VII - USES OF SALTS:

State the uses of sodium chloride (common salt).

State the sources of sodium chloride:

- mine (mineral)
- sea

Identify different compositions of both processed and purified salt.

VIII - LEAVENING AGENTS:

State the uses of leavening agents in cake baking.

- baking powder
- baking soda
- ammonium compound

State the original source of each.

State the usage of each in baking.

State the effect of using each.

State the botanical classification of yeast.

State the micro-organism group to which yeast belongs.

State the basic fundamentals of growing yeast.

- living organisms
- reproduction
- budding
- nutrients
- environment

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Describe the different types of cultured and wild yeast (including manufactured types).

State the theory and use of fermentation.

- define the meaning of the word "fermentation"
- describe the process of chemical and physical change
- state the effects of temperature on fermentation; heat, extreme cold
- state the recommended shelf life for each product
- describe the use of fermentation in bread making
- state the effects and changes of flavour and taste

UNIT IX: CHOCOLATE AND FLAVOURINGS:

Identify the botanical classification of cocoa beans.

- explain the function of chocolate products

Identify the basic production of chocolate coating and chocolate products.

- explain the different tempering method of couverture

Identify natural, imitation and artificial flavours.

- explain the method of obtaining essential oils and emulsions

EVALUATION:

Student's final grade will consist of the following components:

Three tests will be given; approximate dates:

October _____
November _____
December _____

Each test will be out of 100%

GRADING SYSTEM:

Chef Training:

A+ 90-100%
A 80- 89%
B 70- 79%
C 60- 69%
R Repeat - under 59%

Apprentices:

A 85-100% Excellent
B 75- 84% Above Average
C 60- 74% Average
D 50- 59% Below Average
F 0- 49% Failure

GUIDELINES RE GRADING:

ASSIGNMENTS:

Since one of our goals is to assist students in the development of proper business habits, assignments will be treated as reports one would provide to an employer, i.e. in a timely and businesslike manner. **Therefore assignments will be due at the beginning of class and will be 100% complete. No extension will be given unless the student and the professor have come to an agreement prior to the due date.**

TESTS:

If a student is not able to write a test because of illness or a legitimate emergency, that student must contact the professor **prior** to the test or as soon as possible and provide an explanation which is acceptable to the professor. In cases where the student has contacted the professor and where the reason is not classified as an emergency, i.e. slept in, forgot, etc., the highest achievable grade is a "C". In cases where the student has not contacted the professor, the student will receive a mark of "0" on that test.

SPECIAL NOTES:

Dress Code:

All students are required to wear their uniforms while in the hospitality and tourism institute, both in and out of the classroom.

Special Needs:

If you are a student with special needs (eg. Physical limitations, visual impairments, learning disabilities), you are encouraged to discuss required accommodations with the professor and/or contact the Special Needs Office, Room E1204, ext. 493, 717, 491 so that support services can be arranged for you.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in the "Statement of Student Rights & Responsibilities". Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided by the professor.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post secondary institutions.

Substitute course information - available at the Registrar's Office

The professor reserves the right to modify the course as deemed.