Course Syllabus

1. Name of Curriculum Bachelor of Science (Food Science and Technology)

Faculty/Institute/College International College, Mahidol University

2. Course Code ICFS 426

Course Title Bakery Product Technology

3. Number of Credits 4(3-2-7) (Lecture /Lab/self-study)

4. Prerequisite -

5. Type of Course Major Required course

6. Trimester / Academic year First Trimester/ 2019-2020

7. Number of students 7-25 students

8. Course Description:

Properties, chemistry and selection of flour and other ingredients; classification of bakery products and their production; sensory attributes of bakery products and its evaluation, packaging, changes during storage and factors that affect shelf-life of finished products.

9. Course Objectives

Student will understand chemistry and functions of major baking ingredients, overall baking process for different type of baked products, sensory attribute and its evaluation and changes during storage. Student will be able to differentiate types and quality of baked products and understand their factors as well as carry out basic formulation and production of some baked products.

10. Course Outline:

Week	Topic
1	Course overview; Introduction of baked products
2	Flour
3	Bread ingredients
4	Bread manufacture
5	Bread: Process optimisation and control; formulation
6	Frozen dough and par-baked products; steamed bread
7	"Midterm Review and Assessment (R&A) period"
8	Cake ingredients, manufacture, formulation
9	Pastries and biscuits and cookies
10	Sensorial attributes and quality control
11	Packaging and shelf-life prediction of bakery products
12	Bakery product for special diet

11. Teaching Method *(s)*

1. Lecture
2. Suggested readings
3. Discussion in class
4. Lab activity
5. Assignment

12. Measurement and Evaluation of Student Achievement

Student achievement is measured and evaluated by ability to:

1. Describe chemistry and functions of major baking ingredients
2. Understand overall baking process for different type of baked products, its sensory attribute and changes during storage
3. Differentiate types and quality of baked products and understand their factors
4. Execute basic formulation and production of some baked products
5. Demonstrate an ability to work collaboratively and independently

Student's achievement will be graded according to the college and university standard using the symbols: A, B+, B, C+, C, D+, D and F. Minimal passing level is 60%. Student who earns 90% and above will have Grade A; 89-85% Grade B+ , 84-80% Grade B, 79-75% Grade C+, 74-70% Grade C, 69-65% Grade D+, 64-60% D, less than 60 Grade F. Students must attend at least 80% of the total class hours of this course.

Ratio of score

Midterm Examination	35%
Final Examination	35%
Lab report	20%
Assignment and Presentation	10%
Total	100%

14. References:

1) Cauvain, S. P. 2017. Baking Problems Solved: 2nd edition. Elsevier Ltd.
2) Zhou, W., Hui, Y.H., Leyn, I.D., Pagani, M.A., Rosell, C.M., Selman, J.D. & Therdthai, N. 2014. Bakery Products Science and Technology: 2nd edition. John Wiley & Sons, Ltd.

15. Instructors:

Ms. Chutamas Jayuutdiskul

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Note: Rules and regulations are referring to 'student manual'. Please read carefully.