



Bachelor Management Program in Travel and Service Business Entrepreneurship (International Program)  
Degree Level ☒ Bachelor's Degree ☐ Graduate Diploma ☐ Master's Degree ☐ Higher Graduate Diploma ☐ Ph.D.  
Baking and Pastry  
ICHI 222

Mahidol University International College  
THM Division

## TQF3 Course Specification

### Section 1 General Information

#### 1. Course Code and Title

In Thai	ICTB 332 ธุรกิจขนมอบและเพสทรี
In English	ICTB 332 Baking and Pastry Business

#### 2. Number of Credits 4 (3-2-7)

#### 3. Curriculum and Course Type

3.1 Program of Study Undergraduate Degree (International Program)

3.2 Course Type Elective

#### 4. Course Coordinator and Instructor

4.1 Course Coordinator Rangson Chirakranont

4.2 Instructor Rangson Chirakranont  
Email: rangson.chi@mahidol.ac.th

#### 5. Trimester/Class Level

5.1 Trimester 1, and 3

5.2 Number of Students Allowed Approximately 24 Students

6. Pre-requisite None

7. Co-requisites None

#### 8. Study Site Location Mahidol University International College



## Section 2 Aims and Objectives

### 1. Course Goals

Students will gain theoretical and practical knowledge of kitchen management principles through class-based theory and practical projects

### 2. Objectives of Course Development/Revision

#### 2.1 Course Objectives

After successful completion of the course students will be able to:

- Properly weigh and measure common bakeshop ingredients.
- Describe the function of various bakeshop equipment.
- Identify bakeshop tools. Identify the different categories of ingredients and their roles in the baking process.
- Demonstrate proper handling and storage various ingredients.
- Compare and contrast different doughs and batters mixing methods.
- Describe how to make quality loaf of quick-breads. Distinguish between crisp, soft, and chewy cookies.
- Describe types of cookies, and the methods for mixing, baking and storing them. Identify pie dough ingredients and types.
- Describe the process of making different types of pies.
- Compare and contrast the methods for making and storing custards and puddings. Describe the composition of plated desserts.
- Create appealing à la carte plated dessert. Research careers in the restaurant and food and beverage service industry, including educational and work experience needs for success.

#### 2.2 Course-level Learning Outcomes (CLOs)

By the end of the course, students are able to

1. CLO1 Demonstrate an ability to operate, to enhance job skills and performance, to understand operational problems within the international hospitality industry



2. CLO2 Apply up-to-date skills and knowledge systematically, in order to provide basic and appropriate solutions to problems within the international hospitality industry
3. CLO3 Demonstrate good discipline at work, an ability to develop and update oneself continuously
4. CLO4 Demonstrate an ability to select appropriate information-technology tools, bearing in mind the differences within audience groups

### Section 3 Course Description and Implementation

#### 1. Course Description

ทฤษฎีพื้นฐานและทักษะที่ใช้ในครัวเบเกอรี่ หัวข้อต่างๆรวมถึงการใช้งานของอุปกรณ์และเครื่องมือที่ใช้ในครัว วัตถุดิบต่างๆ เทคนิคหลักที่ใช้ในการประกอบอาหารในครัวเบเกอรี่ เช่น การตี และการผสม เรียนรู้ส่วนผสมและวัตถุดิบต่างๆ จากการทดสอบและชิมรสชาติ การเลือกซื้อและใช้วัตถุดิบที่มีคุณภาพเพื่อใช้ในการผลิตผลิตภัณฑ์ขนมอบ และเพสตรี เช่น คุกกี้ พายผลไม้ ผัก ผลิตภัณฑ์เพิ่มความเข้มข้น ถั่วต่างๆ ผลิตภัณฑ์จากนม ไข่ แป้ง ช็อคโกแลต ไขมันและน้ำมัน

The basic theory and skill sets used throughout the field of baking and pastry, topics covered include the use of hand tools and equipment found in a bakeshop, as well as the exploration of baking and pastry ingredients and their functions, knowledge of the major methods such as beating, blending, creaming, cut in and folding, enhance understanding of the course material by tasting and evaluating products created in class, through testing and tasting to identify and select quality grains, fruits, vegetables, thickening agents, nuts and seeds, dairy products, baking spices, eggs and egg products, flours, chocolates, fats, and oils used in the baking field.

#### 2. Number of hours per trimester

Theory (hours)	Practice (hours)	Self-study (hours)
36	24	56

#### 3. Number of Hours per Week for Individual Advice

At students' request within the working week (Mon-Fri).



#### Section 4: Development of the expected learning outcomes

1. A brief summary of the knowledge or skills expected to develop in students; the course-level expected learning outcomes (CLOs)  
The course learning outcomes are shown in section 2.2
2. How to organize learning experiences to develop the knowledge or skills stated in number 1 and how to measure the learning outcomes

Course Code	Teaching and learning experience management	Learning outcomes measurements
CLO1	Lecture Case studies with past experiences and current events Group discussion and Group assignment	Written examination Presentation Class attendance, class participation, and behavior in class On-time submission of reports and assignments and their quality
CLO2	Lecture Case studies with past experiences and current events Group discussion and Group assignment	Written examination Presentation Class attendance, class participation, and behavior in class On-time submission of reports and assignments and their quality
CLO3	Lecture Case studies with past experiences and current events Emphasis on morality and ethics Group discussion and Group assignment	Written examination Presentation Class attendance, class participation, and behavior in class On-time submission of reports and assignments and their quality
CLO4	Lecture and group discussion of case studies Practical in class Assignment for searching from website, e-learning and report with emphasis on mathe-	Written examination Presentation Class attendance, class participation, and behavior in class



	mathematical numbers and statistics from reliable sources	On-time submission of reports and assignments and their quality
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### 3. TEN CODES OF ETHIC - UNWTO

The principles of the Global Code of Ethics (GCE)

Under THM curriculum, we define the code of ethics into three levels

- 1) Fundamental rules and regulations- Following MUIC students' code of conduct, academic integrity, and honesty;
- 2) Professionalism;
  - Generic professionalism (teamwork, courtesy, service attitude, cultural awareness, team responsibility)
  - Specific industry professionalism (Hotel & Restaurant, MICE& Event, Tourism)
- 3) Social responsibility (community and cultural awareness, sense of protection, indigenous sensitivity, sustainable decisions/solutions);

This subject serves code of ethics level 1 and 2

- 1) Ensuring students follow the MUIC students' code of conduct on grooming, punctuality, and academic integrity and honesty when they attend the course;
- 2) Incorporating in the lecture on the generic professionalism. Students will be informed about the expected and acceptable professional behaviours when working in teams.
- 3) Incorporating into teaching content and the assignment/written exam/team project evaluations/practical exam whether students apply knowledge and performance within the international hospitality industry.



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## Section 5 Lesson Plan and Evaluation

### 1. Lesson Plan

Week	Topic	Number of Hours		Teaching Activities/ Media	Lecturer
		Lecture Hours	Lab/Field Trip/Internship Hours		
1	<ul style="list-style-type: none"> <li>• Course Introduction</li> <li>• Food safety and sanitation</li> <li>• Department Organization</li> <li>• Production</li> </ul>	3	2	Lecture/Demonstration/ Lab production	Rangson Chirakranont
2	<ul style="list-style-type: none"> <li>• Kitchen Utensils and Equipment</li> <li>• Measuring Techniques</li> <li>• Production</li> </ul>	3	2	Lecture/Demonstration/ Lab production	Rangson Chirakranont
3	<ul style="list-style-type: none"> <li>• Baking ingredients; Flours, sweetener, salt, leavening agents</li> <li>• Using of Thickening Agents</li> <li>• Production</li> </ul>	3	2	Lecture/Demonstration/ Lab production	Rangson Chirakranont
4	<ul style="list-style-type: none"> <li>• Cakes; type and method</li> <li>• Cookies; type and texture</li> <li>• Production</li> </ul>	3	2	Lecture/Demonstration/ Lab production	Rangson Chirakranont
5	<ul style="list-style-type: none"> <li>• Introduction to entremets and its components</li> <li>• Writing with chocolate technique</li> <li>• Production</li> </ul>	3	2	Lecture/Demonstration/ Lab production	Rangson Chirakranont
6	<ul style="list-style-type: none"> <li>• Introduction to chocolate; dark, milk and white chocolate</li> <li>• Production</li> </ul>	3	2	Lecture/Demonstration/ Lab production	Rangson Chirakranont
7	<ul style="list-style-type: none"> <li>• Introduction to restaurant desserts.</li> <li>• Production</li> </ul>	3	2	Lecture/Demonstration/ Lab production	Rangson Chirakranont
8	<ul style="list-style-type: none"> <li>• Introduction to Jam making</li> <li>• Production</li> </ul>	3	2	Demonstration/ Lab production	Rangson Chirakranont
9	<ul style="list-style-type: none"> <li>• Production</li> </ul>	3	2	Demonstration/ Lab production	Rangson Chirakranont
10	<ul style="list-style-type: none"> <li>• Production</li> </ul>	3	2	Demonstration/	Rangson



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				Lab production	Chirakranont
11	Students' assignment presentation • Production	3	2	Research/ Discussion	Rangson Chirakranont
12	<b>Final exam</b>	3	2	Practical exam	Rangson Chirakranont
	Total	36	24		

## 2. Evaluation of the CLOs

### 2.1 Measurement and Evaluation of learning achievement

#### a. Formative assessment

N/A

#### b. Summative assessment

##### (1) Tool and weight for measurement and evaluation

Learning Outcomes	Measurement Method	Weight (Percentage)	
CLO1 Demonstrate an ability to operate, to enhance job skills and performance, to understand operational problems within the international hospitality industry	Midterm Examination	30	30
	Quiz	10	10
CLO4 Demonstrate an ability to select appropriate information-technology tools, bearing in mind the differences within audience groups	Assignment/ Presentation	10	10
CLO3 Demonstrate good discipline at work, an ability to develop and update oneself continuously CLO2 Apply up-to-date skills and knowledge systematically, in order to provide basic and appropriate solutions to problems within the international hospitality industry	Attendance	20	20
	<b>Practical Examination</b>	30	30
Total			100



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## Standard Rubric

### 1. Class Participation

20%

Your active participation and interaction with the lecturer and classmates is very important. Please ensure that you are well prepared for each class and that you enthusiastically contribute to the class discussion.

*Date: Ongoing*

How Assessment Will be Graded

A. ASSESSMENT CRITERIA FOR CLASS PARTICIPATION					
Criteria	Excellent (A)	Good (B to B+)	Fair (C to C+)	Very poor (D to D+)	Fail (F)
Participation in-class discussion	Often participated in in-class activities, answered questions and posed thoughtful questions without teacher prompting.	Sometimes participated in in-class activities, and answered questions when called upon by the teacher.	Occasionally participated in class activity; responded to teacher questions.	Rarely participated in class activity; rarely responded to teacher questions.	Never participated in class activity; did not respond to teacher questions.
Total for this assessment to be added to other subject assessments to give an overall grade for the subject from A-F.					

### 2. Group Project

10%

*Date: Week 11*

How Assessment Will be Graded

B. ASSESSMENT CRITERIA FOR GROUP PROJECT					
Criteria	Excellent (A)	Good (B to B+)	Fair (C to C+)	Very poor (D to D+)	Fail (F)
Organisation	Very well-organized, complete and factual, correctly formatted	Well-organized, mostly complete and factual, very few errors in format	Fairly well-organized, generally complete and factual, a few errors in format	Poorly organized, lacking significant factual information, several errors in format.	Badly organized, lacking factual information, many errors in format.
Process	Clear and extensive discussion of issues and challenges, resulting in comprehensive understanding of the culinary practices	Thorough discussion of issues and challenges, resulting in very good understanding of the culinary practices	Satisfactory discussion of issues & challenges, resulting in reasonable understanding of the culinary practices	Basic or no discussion of issues & challenges, resulting in poor understanding of the culinary practices	No discussion of issues & challenges, resulting in very poor understanding of the culinary practices
Application	Critically evaluated and successfully applied concepts in solving a real-life problem	Evaluated and applied concepts in solving a real-life problem	Satisfactorily evaluated and applied concepts in solving a real-life problem	Poorly applied concepts in solving a real-life problem	Unable to apply concepts to resolve a problem
Analytical skills	Recommendation is very clear and very well-supported by factual arguments.	Recommendation is clear and well-supported by factual arguments.	Recommendation is reasonably clear and is satisfactorily supported by factual arguments.	Recommendation is unclear and mainly supported by opinions.	Recommendation is very unclear and supported by opinions.
Teamwork	All group members fully and actively involved in research, planning,	All group members actively involved in research, planning,	All members involved in most group activities.	Inconsistent effort by group members.	Poor effort by group members.





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### 3. Written examination – Mid-term examination

40%

*Date: Week 2, 3, 4, and 6*

How Assessment Will be Graded

ASSESSMENT CRITERIA FOR WRITTEN EXAMINATION					
Criteria	Excellent (A)	Good (B to B+)	Fair (C to C+)	Very poor (D to D+)	Fail (F)
Knowledge and comprehension	Demonstrated <b>comprehensive</b> knowledge and understanding of the subject.	Demonstrated <b>good</b> knowledge and understanding of the subject.	Demonstrated <b>satisfactory</b> knowledge and understanding of the subject.	Demonstrated a <b>very limited</b> knowledge and understanding of the subject.	Demonstrated <b>very poor</b> knowledge and understanding of the subject.
Application	Demonstrated <b>substantial</b> application of concepts to differentiate types of tourism and identify diverse motivating factors.	Demonstrated <b>clear</b> application of concepts to differentiate types of tourism and identify diverse motivating factors.	Demonstrated <b>satisfactory</b> application of concepts to differentiate types of tourism and identify diverse motivating factors.	Demonstrated <b>very limited</b> ability to apply concepts to differentiate types of tourism and identify diverse motivating factors.	<b>Unable to apply</b> concepts to differentiate types of tourism and identify diverse motivating factors.
Analysis	Demonstrated <b>clearly</b> the ability to analyze and draw <b>appropriate and inventive</b> conclusions.	Demonstrated <b>good effort</b> in analyzing and drawing conclusions.	<b>Satisfactory evidence</b> of analyzing and drawing conclusions.	<b>Minimal evidence</b> of analyzing and drawing conclusions.	<b>Inability</b> to analyze and draw conclusions.

### 4. Practical examination – Final examination

30%

Practical Examination will be conducted to evaluate students' understanding and application of knowledge of key concepts and principles

*Date: Week 12*

How Assessment Will be Graded

ASSESSMENT CRITERIA FOR Practical Examination					
Assessment Criteria	Excellent (A)	Good (B to B+)	Fair (C to C+)	Very poor (D to D+)	Fail (F)
Mis en Place and organization	Very well-organized, complete and factual, correctly formatted. Work flow is efficient.	Well-organized, mostly complete and factual, very few errors in format. Workflow is good and working table kept clear.	Fairly well-organized, generally complete and factual, a few errors in format. Workflow is fair and working table kept clear in some area but need some small improvements.	Poorly organized, lacking preparation processes, several errors in format. Workflow is unorganized and working table is not kept clear and need improvements.	Badly organized, lacking factual information, many errors in format. Working table is not kept clear and improvement needed.



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<b>Sanitation and safety</b>	<b>Clear and extensive</b> use all of sanitation and food handling practices, all work station area were kept clean and sanitized.	<b>Most</b> sanitation and food handling practices were applied, most work station area were kept clean and sanitized.	<b>Satisfactory</b> sanitation techniques, work station area were kept clear of debris.	<b>Poorly</b> sanitation techniques, with several areas needing improvement.	<b>Overall</b> sanitation and safety techniques were not carried out in a safe and sanitary manner.
<b>Proper use of equipment and tools</b>	<b>Very well operated</b> stationary equipment, used all tools and small wares correctly.	<b>Well operated</b> stationary equipment, used all tools and small wares correctly	<b>Satisfactorily operated</b> stationary equipment, used all tools and small wares correctly	<b>Poorly operated</b> stationary equipment, used all tools and small wares, some improvement is needed.	<b>Unable to operate</b> , significant improvement is needed in the use of small wares and equipment.
<b>Baking techniques and skills.</b>	<b>Demonstrated excellent</b> standard for all classical baking techniques. Apply proper baking technique for all different type of desserts. Using correct tools and equipment for the job	<b>Demonstrated good practice</b> for all classical baking techniques. Apply proper baking technique for most different type of desserts. Using correct mixing motions and equipment for the job	<b>Demonstrated some</b> classical baking techniques. Using proper baking technique for some type of desserts. Using correct mixing motions and equipment for the job.	<b>Demonstrated very limited</b> classical baking techniques. Apply few proper cooking techniques for all different type of desserts. Able to use some mixing motions and equipment with needing improvement.	<b>Unable to apply</b> proper baking technique for most type of desserts. Fail to demonstrate using mixing method for the job.
<b>Teamwork</b>	All group members <b>fully and actively involved</b> in all tasks. Work very well in team environment and show initiative and outstanding group skills.	All group members <b>actively involved</b> in all tasks. Work well in team environment and show good group skills.	All members <b>involved</b> in most group activities. Work fairly well in team environment with some group skills needing improvement.	<b>Inconsistent effort</b> by group members. Difficulty performing in team setting.	<b>Poor effort</b> by group members. Significant improvements needed in order to function well with others.

## (2) Measurement and evaluation



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For Grade A - F Grade	Achievement	Final Score (% Range)	GPA
A	Excellent	90-100	4.0
B+	Very good	85-89	3.5
B	Good	80-84	3.0
C+	Fairly good	75-79	2.5
C	Fair	70-74	2.0
D+	Poor	65-69	1.5
D	Very Poor	60-64	1.0
F	Fail	Less than 60	0.0

(3) Re-examination (if the course allows any)

N/A

### 3. Students' Appeal

Following MUIC Appeal Procedures

## Section 6 Teaching Resources



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### 1. Required Texts

- 1) Beranbaum, R. L. (2014). *The baking bible*. Boston: Houghton Mifflin Harcourt.
- 2) Brown, Amy C., (2008). *Understanding food: principles and preparation*. Belmont, California: Thomson/Wadsworth.
- 3) Culinary Institute of America. (2013). *Baking and Pastry: Mastering the Art and Craft*, Study Guide, 3rd Edition. John Wiley & Sons
- 4) The Culinary Institute of America (2006). *The Professional Chef*. (8th ed.), London: Wiley.
- 5) Johnson and Wales University. *Culinary Essentials*. USA: The McGraw-Hill Companies. 2010
- 6) Johnson and Wales University. *Culinary Fundamentals*. Thailand: Kendall/Hunt Publishing Company. 2002
- 7) National Restaurant Association Educational Foundation. *ServSafe Coursebook*. N.p.: National Restaurant Association Educational Foundation, 2004.

### 2. Suggested Materials

- 1) Beranbaum, R. L. (2014). *The baking bible*. Boston: Houghton Mifflin Harcourt.

### 3. Other Resources (if any)



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## Section 7 Evaluation and Improvement of Course Implementation

### 1. Strategy for Course Effectiveness Evaluation by Students

- (1) Lecturer's ability to clarify themes and course content
- (2) Student evaluation
- (3) Successful completion of course content
- (4) Students' ability to apply knowledge beyond academic settings
- (5) Lecturer's ability to motivate and engage students

### 2. Strategy for Teaching Evaluation

- (1) Student feedback
- (2) Peer comments and discussions with other lecturers

### 3. Teaching Improvement

Update wide range teaching methods using various professional resources

### 4. Verification of Standard of Learning Outcome for the Course

- (1) Group discussions
- (2) Group presentations
- (3) Case studies
- (4) Class participation
- (5) Written works
- (6) Final examination

### 5. Revision Process and Improvement Plan for Course Effectiveness

Meeting with the program director to review the course before semester starts and before each period of teaching



## Appendix

### Relations between the course and the program

**Table 1** Relations between the course and the PLOs

Baking and pastry	PLOs					
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
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**Table 2** Relations between CLOs and PLOs

ICHI 222	PLOs					
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
CLO1 Demonstrate an ability to operate, to enhance job skills and performance, to understand operational problems within the international hospitality industry	1.1					
CLO2 Apply up-to-date skills and knowledge systematically, in order to provide basic and appropriate solutions to problems within the international hospitality industry	1.2					
CLO3 Demonstrate good discipline at work, an ability to develop and update oneself continuously			3.3			
CLO4 Demonstrate an ability to select appropriate information-technology tools, bearing in mind the differences within audience groups				4.2		



Table 3 PLOs that the course is responsible for

PLOs	SubPLOs
PLO1 Apply operational knowledge and practices in the selected travel and service business industries	1.1 Demonstrate an ability to operate, to enhance job skills and performance, to understand operational problems within the travel and related service businesses
PLO2 Illustrate managerial and entrepreneurial knowledge and practices in the selected travel and service business industries	2.3 Demonstrate an ability to respond to potential trends in the travel and related service businesses
	2.4 Apply systematic thinking and research techniques to provide appropriate solutions to problems within the travel and related service businesses
PLO4 Demonstrate good teamwork and express appropriate roles in the team working environment	4.3 Demonstrate and ability to use effectively work with team members, be culturally aware, and assist work colleagues in solving problems