



環球科技大學
TransWorld University

存誠 創意 務實 競爭

103 年度教學卓越計畫

E-2-1-2 辦理海外教育合作協同教學

分項計畫名稱：E-2 厚實及推展海外姐妹校關係

工作編號：E-2-1-2

工作名稱：辦理海外教育合作協同教學

執行單位：觀光與餐飲旅館系

中華民國 103 年 09 月 日

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一、成果自評

※請以本項工作整體成果自評，如有多場次活動，請彙整質量化成果來說明，謝謝。

分項計畫名稱	「E-2 厚實及推展海外姐妹校關係」		
工作編號	E-2-1-2(4 碼)	工作名稱	辦理海外教育合作協同教學-餐飲術科認證
人員參與情形	校內同仁： 30 人	校外同仁： 4 人	
	校內學生： 180 人	校外學生： 0 人	
	其他(職員)： 3 人	總計參與人數	共 <u>217</u> 人
執行成果			
預定成效	質化	提升教師教學質量與加強與姐妹校的實質合作。	
	量化	擴展學生國際視野，提升學生參與協同教學學生人次達 200 人以上且外籍教師來自馬來西亞、印度、法國等三個國家。	
實際成果	質化	辦理三場講座「法式麵包製作」、「新馬特色餐製作」、「創意西餐製作」，提升教師教學質量，以增進與姐妹校的實質合作。	
	量化	1. 對象:觀餐系/廚藝系學生 2. 場次: 3 場次 3. 執行內容: 邀請 Taylor's University, Hotel School (1) Chef. Bala Murali Nanda(印度) (2) Chef. Frederic Raymond Paul Cerchi(法國) (3) 尊孔中學 / 餐飲管理科梁振安等三位教授，協助異國料理之專技課程協同教學 4. 參與活動人數:217 人次 5. 整體教學滿意度平均：達 4.84	<input type="checkbox"/> 超越目標 _____ % <input checked="" type="checkbox"/> 達成目標 <input type="checkbox"/> 未達成目標，請說明： <hr/>

二、活動企劃書

(一) 工作項目基本資料：

工作編號	E-2-1-2	預訂完成日期	103.10.30
工作名稱	辦理海外教育合作協同教學		
負責人姓名	丁一倫	校內分機/手機	
E-MAIL	allen.ding@msa.hinet.net		

貳、工作內容描述：

一、現況需求分析：

- (一) 為加強與海外教育合作夥伴學術交流及提供其專業課程規劃經驗，並營造學習互訪的環境。
- (二) 邀請韓國又松大學教授至本校指導「法式麵包製作」、「新馬特色餐製作」、「創意西餐製作」等，透過理論及實作課程，讓觀餐系師生皆能瞭解韓國餐飲文化。
- (三) 提昇本系海外學術交流，擴展師生國際視野及強化教師教學及研究能量。

二、辦理單位：觀光與餐飲旅館系

三、活動地點：環球科技大學務實樓EZ100/CA101/CA201專業教室

四、預計參加人數：200人次

五、活動時間：

活動日期	活動名稱	責任者	備註
103.10.13~17	辦理海外教育合作協同教學	丁一倫	

六、活動時程及任務分配表：

預定完成日期	任務名稱	責任者	備註
103.10.30	辦理海外教育合作協同教學	丁一倫	
103.06.10	前置作業 - 與 Taylor's	丁一倫	

	University, Hotel School 及 尊孔中學 協調活動細流		
103.09.10	協同技術課程及授課教師擬定	丁一倫	
103.10.13-17	參與學生之安排與活動執行	洪珈亦	

七、重要工作查核點：

查核日	查核內容	備註
103.03.31	提出活動簽呈、企劃書及核定清單	在3月30日前
103.07.30-8:30	異動-活動日期及國外學者， 原韓國又松大學，調整為馬來西亞 Taylor's University, Hotel School。 自101學年度起觀光與餐飲旅館系之馬來西亞籍學生逐年增加，為提昇國際文化多元及教學技術之交流，增加本系學生對於馬來西亞文化和餐飲的學習，故調整為馬來西亞 Taylor's University, Hotel School Bala Murali Nanda及尊孔中學梁振安等三位老師協同教學。 Taylor's University, Hotel School (1) Chef. Bala Murali Nanda (2) Chef. Frederic Raymond Paul Cerchi (3) 尊孔中學 / 餐飲管理科 梁振安 老師	8月中旬
103.10.13-17	辦理計畫之活動課程	依計畫規定期限之前
103.10.30	提出核銷憑證及成果	活動結束7日內
103.10.30	完成核銷	活動結束14日內

八、預期成效：

(一)提升教師教學質量與加強與姐妹校的實質合作。

(二)擴展學生國際視野，提升學生參與協同教學學生人次達200人以上。

九、預估執行經費：

三、執行內容

2014 Teaching & Learning Excellence Project

Name: The Educational Cooperation of Collaborative Teaching Overseas

Dates: Oct. 13, 2014 to Oct. 17, 2014

Locations: Conference Hall, HS506 & Baking Kitchen Classroom, EZ100

Organizer: The Department of Tourism and Hospitality, TransWorld University

活動日程 Program				
日期 Date	時間 Time	內容 Contents	人員 Instructors	負責老師/ 上課班級 Classes
10.13 Oct. 13 Monday (周一)		教師抵達台灣 Arrival 教學會議	Taylor's University, Hotel School (1) Chef. Bala Murali Nanda (2) Chef. Frederic Raymond Paul Cerchi (3) 尊孔中學 / 餐飲管理科 梁振安 老師	丁一倫 許良仲 洪珈亦
	18:20-20:00	晚餐 Dinner		丁一倫
10.14 Oct. 14 Tuesday (周二)	08:00-12:00	法式麵包製作 Baguette Baking	Chef. Frederic Raymond Paul Cerchi	丁一倫 許良仲 莊英珠 洪珈亦 蔡佳紋 觀餐一甲
	12:10-13:10	午餐 Lunch		
	13:20-17:00	新馬特色餐製作 Singaporean-Malaysian Specialty Cooking	尊孔中學 / 餐飲管理科 梁振安 老師	丁一倫 許良仲 陳金選 洪珈亦 蔡佳紋 觀餐二戊

活動日程 Program				
日期 Date	時間 Time	內容 Contents	人員 Instructors	負責老師/ 上課班級 Classes
	18:20-20:00	晚餐 Dinner		
10.15 Oct. 15 (周三) Wednesday	08:10-12:00	創意西餐製作 Creative Western Cooking	Taylor's University, Hotel School Chef. Bala Murali Nanda	丁一倫 許良仲 郭木炎 黃聰汶 洪珈亦 蔡佳紋 廚藝二乙
	12:10-13:10	午餐 Lunch		
	13:30-15:30	烘焙與廚藝交流會議 Conference of Baking and Cooking Exchanges		
	15:40-17:00	參訪校園 Tour of the campus		
	18:20-20:00	晚餐 Dinner		
10.16 Oct. 16 (周四) Wednesday		廚藝教學交流會議 教學會議	Taylor's University, Hotel School (1) Chef. Bala Murali Nanda (2) Chef. Frederic Raymond Paul Cerchi (3) 尊孔中學 / 餐飲管理科 梁振安 老師	丁一倫 許良仲 洪珈亦
10.17 Oct. 17 (周五) Wednesday		烘焙教學交流會議 教學會議 Q&A 教師返回馬來西亞 Instructors return to Malaysia	Taylor's University, Hotel School (1) Chef. Bala Murali Nanda (2) Chef. Frederic Raymond Paul Cerchi (3) 尊孔中學 / 餐飲管理科 梁振安 老師	

授課教師資料

法式麵包製作



BOULANGERIE 1:

Artisan Bread Baking – Basic Level

Introduction

FLOUR, WATER, SALT, AND YEAST—these four simple ingredients when combined create the magic that is bread. Baking bread is a time-honoured tradition honed over more than six thousand years. The craft is a truly sensory experience: the warmth of the dough in your hands, the aromas lingering in the air during baking, the cracking of the crust as it cools, the complex and seductive flavours on your tongue.

In the world of bread bakers, there has been much debate about the usage of the word artisan. Artisan actually refers to a skilled worker or craftsman, but due to the ebbs and flows of popular usage, it is applied as an adjective for carefully handcrafted food and beverages, such as cheese, wine, chocolate, and of course, bread. Our personal definition of artisan bread is handmade bread that is crafted using quality, natural ingredients and does not include any added chemicals or artificial ingredients. Anyone who considers himself an artisan baker has the responsibility of aiming to reclaim the true origins of the word through experience and education.

Bread baking is a delicate dance between the simple and the complex. On one hand, nothing could be more straightforward: just combining flour, water, salt, and yeast yields a dough that with the baker's touch magically transforms into a crusty baguette or a hearty loaf. On the other hand, the science behind the “magic” is incredibly complicated, and research reveals the complicated process that baking actually is.

Bread making is both an art form and scientific experience. Bread includes elements from various cultures & traditions. It is the symbolic in many ways, hence the variety of shapes and sizes.

Through the process of bread making, individuals will experience the art and science of ingredient manipulation techniques. Flour for instance, when mixed with water and yeast, behaves in many different ways depending on the ratio, temperature, duration, micro-organisms present, physical energy and many more factors.

Boulangerie 1 aims to provide hands-on experience for beginners and bread enthusiasts, which leads to better understanding of a variety of ingredients coupled with the enjoyment of freshly produced breads of their own labour.

Basics

The following is some basic knowledge that is fundamental to bread making.

1/- Ingredients

The main ingredients of bread are strikingly simple: flour, water, salt, and yeast. Each one has a precise role to play in creating a dough that has the qualities desired in the type of bread.

Flour:

One of the primary factors that makes wheat the grain of choice for bread baking is the presence of certain proteins with **gluten-forming** properties. When mixed with water and developed into dough, the wheat flour is given life, and the gluten (wheat protein) creates a structure much like an intricate web. The interlaced gluten strands capture the gases that have been created by the yeast fermentation and are flexible enough to allow the dough to “rise”, expanding in size.

Gluten can be found in abundance in wheat flour that ranges from 8% to 13% depending on the variety of wheat the flour is derived from. The main characteristics of flour are influenced by the development of *glutenin* (elasticity) and *gliadin* (extensibility). The baker needs to master the development of both to achieve good products.

Soft Wheat Flour (Pastry flour)

Also known as low-gluten flour, it is used sparingly in some of the bread recipes. Normally the gluten content is around 8% to 9%. This flour is sometimes mixed into bread dough to buffer “chewiness”. Too much will result in a denser and cake-like texture instead of the usual airy and light bread texture.

Strong Wheat Flour (High gluten flour)

Strong flour has a high gluten level of around 12.5% to 13.5% depending on the wheat variety the flour is derived from. It naturally has a high content of gluten which is vital in producing bread with good volume and lightness. The downside is that if *glutenin* and *gliadin* development is imbalanced (due to improper techniques), the quality of bread will suffer in terms of shape, volume and texture.

All –Purpose Wheat Flour

I would call it “jack of all trades” flour as it has approximately 10.5% to 11.5% gluten. It can be used for cakes and also bread provided caution is practiced. In cakes, it has a tendency to be a little “rubbery” if the *glutenin* is over-developed. In the other hand, in bread making, a little more effort and technique is required to develop enough *glutenin and gliadin* to achieve the require dough “strength”.

Whole-Wheat Flour

Flour that is derived from the whole kernel of wheat excluding the husk but including the bran, germ and endosperm. The germ contains fat that easily turns rancid if oxidized resulting in an unpleasant aroma. Bran contains fibre that may interrupt gluten strength development while endosperm is the main content of wheat that provides the starch and protein that is vital for structure formation of bread. A bread made from 100% whole wheat flour tends to be denser in texture due to the high fibre content. Bakers often mix whole-wheat flour with white flour (only endosperm) to produce lighter textured breads.

Rye Flour

Rye flour is produce from rye kernels which has low protein content. In the market, it comes in 3 main forms: White Rye (only endosperm) which has less flavour and colour, medium dark rye (endosperm and some bran) and dark rye (from whole rye grain) that gives the most flavour. German and Scandinavian-styled breads contain a high percentage of rye. These are the most difficult to master as rye also contains a lot of natural chemical substances and enzymes which disrupts the texture of bread dough. In this basic bread making workshop, we will only be producing bread doughs with low percentage of rye (about 35%).

Yeast:

Yeast is a single-cell organism that feeds from simple sugars naturally present in flour in a process called *fermentation*. In the presence of warmth (ideally 24°C to 26°C) and moisture, this process

takes place and accelerates with higher temperatures. The artisan bread baker strives to enhance the flavour and aroma of the bread by controlling this process of fermentation.

Yeast comes in many forms and is available in both wild and cultured varieties. Wild yeast can be found almost everywhere ranging from our skin surfaces and also on fruits, wheat, etc. Bakers from the early days do not have the luxury of buying yeast off the shelves. Therefore, they rely solely on developing their own cultures. As a result, not all bakers achieve total control of fermentation. Wild yeast is not easily controlled and has irregular “behaviour”.

The yeast that we will be using in this workshop is instant dried cultured yeast. Instant means that the granules are elongated and fine with more surface contact which speeds up reactions. This is to facilitate better control of production in terms of mixing and timing of fermentation.

Water:

Water provides hydration to the ingredients especially flour to enable the starch to expand, gluten to develop, enzymes to react, yeast to activate, ingredients to dissolve and blend, etc. Some recipes require purely water while others may use ingredients with high water content such as milk. Bakers often pay attention to hydration rates of dough, meaning how much water (or liquids) they plan to add in relation to the quantity of flour. For example, if a dough has 1000 grams of flour and 750 grams of liquid, it has a hydration rate of 75%.

Too little hydration results in bread that is lacking in volume, dry crumb (interior), slower development and mediocre quality bread. Too high levels of hydration results in a limp dough, fast depletion of food for the yeast, high enzyme activity, difficult to shape, and if the wrong techniques of mixing is used, will result in an under-developed dough (lack in development of gluten strength).

Salt:

Even though it is used in very small amounts, salt is an essential ingredient with a critical role in bread baking. Other than providing flavour, it has a lot of influence on the hydration rate of flour, yeast activity, dough strength, enzyme activity, crust colour, etc. You must learn to observe its many roles and the techniques required to control the reactions of salt on the dough for good bread production.

Fats & Oils:

Fats and oils influence the texture of bread. It also gives flavour depending on the variety of oil/fat used. Fats also aid in providing “moistness” to the texture of bread. The downside of fats and oils is that if the wrong proportion or timing when adding to dough happens, it disrupts the development of gluten, resulting in bread that is dense and difficult to cook thoroughly. Bakers sometimes use egg yolks which contains a high percentage of fat to produce rich bread doughs.

Bread Improvers:

Bread improvers come in many forms and brands. They normally contain emulsifiers produced by manufacturers to gain better texture, etc. Bread improvers can be costly or only available in large amount packages because they are aimed at high-volume productions where bakeries cannot afford errors in any stage of production. They also play a part in preserving pre-prepared doughs. We will not be using any improvers as this workshop is aimed at mastering basic artisan bread making techniques.

2/- Ten steps of Baking

All bread-making recipes follow a set sequence of definitive stages. These stages are sorted into 10 basic steps and it is critical to know what is happening at each step of the process and why.

1. “Mise en Place”

Literally means “setting in place” and it is the primary organizational philosophy across all culinary fields worldwide. It is about preparing both mentally and physically for the task at hand (reading formula, gather necessary equipment, scaling ingredients, etc.)

2. Mixing

- Stage at which ingredients are combined and married into a common mass.
- Can be done by hand, in a food processor, or in a mixer.
- Initial mix takes 3 to 4 minutes and should be done on first speed (slowest speed available).
- Second mix (kneading) is done at second speed (higher speed) in order to encourage the formation of more gluten strands that gives dough elasticity and extensibility. Usually takes 8 to 12 min. depending on characteristics of flour, speed, and amount.
- Caution must be taken in order not to over-knead as dough will be “over-stressed” and tear.
- Salt is preferably added half way during mixing (salt interferes with hydration process of flour).



3. Bulk Fermentation

- Turn the dough onto a floured surface (or into a bowl) and protect from drying by covering with a plastic wrap
- Place in a neutral environment with the ideal temperature between 24°C and 26°C and let the dough recover, relax, ferment and allow to rise to about 2.5 to 3 times the original size.
- One of the most important steps with regards to taste as 75% of the flavour of the bread is developed during this time.

4. Stretch and Folds/Degassing

- Starting about halfway into the bulk fermentation process, many doughs benefit from a series of stretches and folds.
- It performs 3 key functions:
 - Degasses the dough and expels the old carbon dioxide, making room for the yeast's continuous production of new carbon dioxide;
 - Creates strength by aligning the gluten strands in a controlled formation;
 - Equalizes the temperature of the dough by folding.

5. Dividing

- Main dough is divided into smaller units for shaping and baking.

- Using a scale is helpful in ensuring uniform pieces.

6. Pre-shaping/Shaping

- Pre-shape the dough according to the desired final shape.
- Care should be taken not to add too much flour during this process.
- Allow the dough to rest for 20 min. between pre-shaping and final shaping.

7. Final Proofing (2nd fermentation)

- This stage gives the dough its final rise. The dough is still fermenting, yet at a slower rate than during the bulk fermentation stage. The baker pushes the volume of the loaf to approximately 85% of its full capacity.
- Caution not to over-proof as dough will collapse resulting in a “flat looking” bread with poor “oven-spring” quality.
- Proofing temperature can be slightly higher than bulk fermentation temperature.
- Use of dough proofer or dough retarder recommended for accelerating or delaying the fermentation process.

8. Scoring and/or Glazing

- Although it enhances the appearance of the bread, the main purpose of scoring (slashing) bread is to encourage the expansion of crumb and allows excess steam to escape. It also prevents the crust from bursting open at the sides
- Glazes can affect the finished taste and texture of the crust as well as the appearance. A glaze is applied before or after baking, depending on the glaze and the effect desired. Some glazes can be brushed on both before and after baking. Common glazes are water, egg wash, milk, honey, olive oil...

9. Baking

- Most important changes in baking:
 - Oven spring = rapid rising in the oven due to production and expansion of trapped gases as a result of the oven heat. The yeast is very active at first but is killed when the temperature inside the dough reaches 60°C.
 - Coagulation of proteins and gelatinization of starches (the bread becomes firm and holds its shape).
 - Formation and browning of the crust.

10. Cooling/Storage

- At this stage, the bread should feel hollow when tapped and is best cooled on a wire rack.
- Cooling is essential to the baking process. After the bread is placed on a cooling rack, the starches continue to gelatinize, setting the bread into its final form and flavour.

- Bread with crispy crust should have ‘crackling’ sound as the crumb cools.

Last but not least

Bread making can become addictive as it relieves stress and provides aerobic exercise (lots of it!!!). Benchmarking the quality of commercially available bread and the homemade variety will leave you with pros and cons. The pros is that you will have the knowledge and control of what you want to put inside your bread, attaining better understanding of different oven types, techniques of improving your oven performance and there is nothing more rewarding than the fantastic aroma of properly made fresh bread.

Much of the techniques shown by the facilitator will be focused on home baking. Should you have any intentions on commercializing your bread production, please highlight to the facilitator so that he/she can advise you on the adjustments of techniques.

Formulating with “Baker’s Percentage”

Professional bakers express many of their formulas in baker’s percentage because it allows for different formulas to be easily compared. Many serious home bakers have adopted this approach as well, because it allows for a formula to be more easily increased or decreased as the desired yields requires.

Each ingredient in the formula is expressed as a percentage of the total amount of flour in the formula. Therefore flour’s percentage is constant at 100%. If there is more than one type of flour listed, then the combination of the weights of all flours would be 100%.

For example, in the following hypothetical formula, the bread flour and whole wheat flour percentages add up to 100%:

Bread Flour	800gr.	80%
Whole Wheat Flour	200gr.	20%
Water	650gr.	65%
Salt	30gr.	3%
Yeast	20gr.	2%

To determine the percentage of the other ingredients, we divide each one by the weight of the flour, and then multiply the result (which is in decimal form) by 100 to convert it to a percent. For example, to calculate the percentage of water, we divide it by the flour and multiply by 100: $650/1000 = 0.65$

$$0.65 \times 100 = 65\%.$$

It is worth noting that by simply looking at the percentages we can ascertain important things about this bread. For one thing, we know at a glance that the bread has a 65% hydration (hydration is defined as the percentage of liquid in a dough, again based on the flour weight). If we had used gallon pitchers to measure the water, we would have the rather cumbersome formula, much more difficult to assess.

- **Computing Kilograms from Percentages**

For our second example, let's assume that a baker colleague has given you his or her formula for ciabatta:

Flour	100%
Water	73%
Salt	1.8%
Yeast	1.1%

You decide to make this dough using 800gr. of flour:

Flour	100%	800gr.
Water	73%	?
Salt	1.8%	?
Yeast	1.1%	?

To obtain the weights of the remaining ingredients, first we multiply 800 by 73, and then divide the result by 100. For example, the water is calculated as $800 \times 73 = 58400$.

Then we divide this by 100 to obtain the weight of the water: $58400/100 = 584$.

The entire formula would look like this:

Flour	100%	800gr.
Water	73%	584gr. $(800 \times 73)/100$
Salt	1.8%	14.4gr. $(800 \times 1.8)/100$
Yeast	1.1%	8.8gr. $(800 \times 1.1)/100$

- **Resizing a Formula using the Formula Conversion Factor**

There are times when we may need to recalculate the size of a formula in order to make either more or less bread. By employing baker's percentage, this is quick, accurate, and easily learned by the baker. Let's assume that another colleague has given you his formula for French bread:

Flour	1200gr.	100%
Water	780gr.	65%
Salt	24gr.	2%
Yeast	15gr.	1.25%
TOTAL	2019gr.	168.25%

Although you like the bread very much, in your situation you only need to make 1500gr. of dough. How can you recalculate the formula to obtain 1500gr. and retain the percentages of the ingredients?

The first step is to determine the Formula Conversion Factor. We establish this by adding the percentages of the formula, which in this case total 168.25. Then divide our new desired dough weight by the sum of the percentages:

$1500/168.25 = 8.915$. It is preferable to round this figure up, because it is better to have a little extra bread rather than not enough, so we round up to 9.

The next step is to multiply the percentages of each ingredient by 9:

Flour = $(100 \times 9 = 900\text{gr.})$

Water = $(65 \times 9 = 585)$

Salt = $(2 \times 9 = 18)$

Yeast = $(1.25 \times 9 = 11.25)$

TOTAL = 1514.25 grams of dough

Desired Dough Temperature

One of the most important skills a baker must learn is the ability to accurately control dough temperature. The benefits are clear and immediate: more consistency in fermentation and in bread

flavour, and more predictability in the overall production schedule. If a dough is coming off the machine at 19°C one day and 27°the next, there will not be uniformity in the results.

By mixing dough that are in the temperature zone that most favours both fermentation and flavour development, the home baker is well on the way to making consistent high-quality bread. The temperature that encourages good gas production from the yeast and at the same time good flavour development from the lactobacilli is about 24°C to 26°C. Indeed, it is the temperature that works best, particularly for wheat-based breads.

Desired dough temperature is not an exact science, and there are numerous variables that can affect the results. It is, though, the best tool at the baker’s disposal for consistently mixing doughs that stay within expected temperatures parameters. The calculation of desired dough temperature involves taking into consideration several factors. These factors are the variables over which we have no control when we enter the bakeshop or kitchen and prepare to mix the dough: the air temperature, the temperature of the flour, the “friction factor” of the mixer. After figuring these, it’s easy and quick to compute the water temperature (the only variable over which we do have control).

Let’s assume that we want a desired dough temperature of 24°C. With a straight dough we multiply 24 by 3. The result is the total temperature factor (72°C). Once this factor is determined, the known temperatures are subtracted from it, and the result is the correct temperature of the water for the dough.

Below are 2 examples:

Desired Dough Temperature (D.D.T.)	24° C	24° C
Multiplication Factor	X3 (straight dough)	X4 (dough with preferment)
Total Temperature Factor (T.T.F.)	72	96
Minus Flour Temperature	30°	30°
Minus Room Temperature	30°	30°
Minus Preferment Temperature	n/a	7°
Minus Friction Factor	5°	5°
Water Temperature	7°	24°

Recipe no.1:

BASIC SOFT BREAD DOUGH

DESCRIPTION:

Yeast-raised soft bread dough shaped into a small rounded roll with a soft crust.



Method	Ingredients	Unit	20 rolls	130 rolls	Baker's %
<p>1- Making up soft bread dough:</p> <ul style="list-style-type: none"> - Using electrical mixer, mix all ingredients (except butter) at slow speed for about 10 min. followed by another 5 to 10 min. at medium speed. - Add in the butter and continue kneading till smooth (full gluten development). Check using “window technique”. - Place the dough in a lightly oiled container. <p>2- Bulk Fermentation:</p> <ul style="list-style-type: none"> - Cover and bulk ferment for about 1 hr. <p>3- Dividing/Shaping:</p> <ul style="list-style-type: none"> - Divide the dough into 50gr. pieces - Shape the dough into smooth, round balls and place soft rolls on pans lined down with parchment paper. <p>4- Proofing:</p> <ul style="list-style-type: none"> - Place tray in a proofer between 27°C to 30°C and about 70 to 80% humidity. <p>5- Baking:</p>	Bread Flour	gr.	500	3000	90%
	Soft Flour	gr.	55	330	10%
	Sugar	gr.	110	660	19.8%
	Salt	gr.	7	41	1.2%
	Yeast	gr.	7	41	1.2%
	Milk Powder	gr.	18	105	3.2%
	Egg	no.	1	6	10%
	Milk	gr.	55	330	10%
	Water (cold)	gr.	250	1500	45%
	Butter (soft)	gr.	65	390	11.8%
	TOTAL =			1117 gr.	6697 gr.
<u>Notes:</u>					

- Brush with egg wash (or milk) and sprinkle top with sesame seeds.
Bake at 190°C for about 25-30 min.

6- Cooling:

- Remove from pans and cool rapidly on racks to allow the escape of excess moisture.



Recipe no.7:

CIABATTA

DESCRIPTION:

Italian white bread that is somewhat elongated, broad and flattish. There are many variations of ciabatta.



Method	Ingredients	Unit			Baker's %	
<p>1- Making up ciabatta dough:</p> <p>- Mix A at slow speed for about 10 min., increase to medium speed and mix for another 5 minutes until strong dough is achieved.</p> <p>- Add in mix B and continue to mix for another 5 min. at slow speed until dough is smooth.</p> <p>2- Bulk Fermentation:</p> <p>- Grease container with oil and place dough to bulk ferment for about 30 min.</p>	Mix A					
	Bread Flour	gr.	500	3000	100%	
	Salt	gr.	10	60	2%	
	Yeast	gr.	8	48	1.6%	
	Water	gr.	325	1950	65%	
	Mix B					
	Water		75	450	15%	
	Olive oil		75	450	15%	

3- Stretch and Fold:

- Perform 1st fold and continue to ferment for another 30 min.
- Perform 2nd fold and continue to ferment for another 30 min.

4- Dividing:

- Divide dough into 4 equal parts.

5- Proofing:

- Proof for about 1 hour.

6- Baking:

- Dust surface with flour and bake at 220°C for about 30 min. or until fully cooked.

7- Cooling:

- Remove from pans and cool rapidly on racks to allow the escape of excess moisture

TOTAL =		993 gr.	5958 gr.	
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Notes:

Recipe no.9:

FRENCH BREAD: BAGUETTE

& ÉPI DE BLÉ

DESCRIPTION:

Long thin loaf of French bread that is commonly made from basic lean dough.

It is distinguishable by its length, crisp crust, and slits that enable the proper expansion of gases.




Method	Ingredients	Unit	3 pieces	18 pieces	Baker's %	
<p>1- Making up bread dough:</p> <ul style="list-style-type: none"> - Mix all ingredients at slow speed for 10 min. - Knead to a smooth dough at medium speed (5 min.). <p>2- Bulk Fermentation:</p> <ul style="list-style-type: none"> - Bulk ferment for about 1 hour. <p>3- Dividing/Shaping:</p> <ul style="list-style-type: none"> - Portion dough into 300gr. pieces and shape into balls. - Rest for 20 min. and do the final shaping into baguette shape. <p>4- Proofing:</p> <ul style="list-style-type: none"> - Proof for about 45 min. (double in size). <p>5- Baking:</p> <ul style="list-style-type: none"> - Score baguette. - For making épi, spray surface of the baguette and coat with polenta. Cut with scissors to a "wheat stalk" shape. - Bake at 210°C for about 30 min. or until fully cooked. 	Bread Flour	gr.	500	3000	100%	
	Water	gr.	200	1950	40%	
	Yeast	gr.	5	30	1%	
	Salt	gr.	10	60	2%	
	"Old Dough"	gr.	300	1800	60%	
	Garnish:					
	Polenta	gr.	50	300		
	TOTAL =			1015 gr.	6840 gr.	
	<u>Notes:</u>					


<p>6- Cooling: - Remove from pans and cool rapidly on racks to allow the escape of excess moisture.</p>	
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授課教師資料



新馬特色餐製作



Malaysian Cuisine								
Asam Laksa							Pax : 6	
Description: A fish-based soup Served with thick rice noodle								
Description								
<p>A - PREPARE THE FISH</p> <p>1. Blanch whole fish in a pot of water until cooked. Remove fish and let cool before separating the flesh from the bone. Flake the flesh in small pieces.</p> <p>B - PREPARE THE SOUP</p> <p>1. Strain the stock and add to the pot with tamarind juice, ginger buds, polygonum, fish and sugar to taste.</p> <p>2. Blend the spice paste ingredients until fine. Add to the stock along with the asam keping. Simmer for 20-30 minutes until the soup thicken slightly.</p> <p>3. Add seasoning and taste.</p> <p>C - DECORATION</p> <p>1. Blanch the laksa noodles in boiling water, drain and set aside.</p> <p>2. Slice and shredded all vegetables and leaf for decoration.</p> <p>3. To serve: Put some noodles in a bowl and ladle the soup over it. Put a pinch of each garnishing ingredient over the top and serve.</p>		Ingredients	u n i t	A	B	C	T O T A L	
		BUTCHERY						
		Mackerel	kg	0.6				0.6
		VEGETABLES						
		Shallot	nos		10			10
		Lemongrass	nos		2			2
		Fesh galangal	inch		2.5			2.5
		Fresh red chilli	nos		1	1		2
		Cucumber	nos		1			1
		Red onion	nos		1			1
		Pineapple	kg				0.2	0.2
		HERBS						
		polygonum leaves	spring		3	3		6
		ginger buds	slice		2			2
		Mint leaf	spring			6		6
		DAIRY PRODUCT						
		DRY STORE						
		Thick rice noodle	kg				0.6	0.6
		Dried tamarind slice	slice		5			5
		Dried chilli	nos		3			3
Dried shrimp paste	tsp		1			1		
Black prawn paste condiment	L		AN			AN		
Salt and sugar	KG				AN	AN		
OTHERS								
Water	cup	6				6		
Tamarind juice	L		0.075			0.075		
<p>* Presentation</p> <p>Put some noodles in a bowl and ladle the soup over it.</p> <p>Put a pinch of each garnishing ingredient over the top and serve.</p>								



Malaysian Cuisine								
Rojak Mamak							Pax : 2	
Description: Traditional crisps and vegetable salad dish Served with peanut sauce								
Description								
<p>A - PREPARE PEANUT SAUCE</p> <ol style="list-style-type: none"> 1. Boil and mash sweet potato, set aside until needed. 2. Heat up a sauce pan with oil, saute onion and chili. 3. Add in the mashed sweet potato with water and simmer to thicken. 4. Adjust flavor with tamarind, sugar, salt, light soy sauce, and lime juice. Stir well. 5. Stir in crushed peanut, mix well and keep warm. <p>B - MAKE THE FRIED BATTER</p> <ol style="list-style-type: none"> 1. Mix all ingredient except vegetable, and let it rest for 30 minutes. 2. Add vegetable to batter and mix well. 3. Scoop batter and deep fried the batter in deep fryer to get a 2.5inch round shape. 4. Slice the fried batter. <p>C - PREPARE GARNISH</p> <ol style="list-style-type: none"> 1. Prepare hard boil egg, peel and keep aside. 2. Boil and peel potato, cut into cube and lkeep aside. 3. Deep fried bean curd, slice and keep aside. 4. Clean, peel, then cut cucumber and jicama into maatch stick and keep aside. 5. Clean bean sprout and keep aside. <p>D - DECORATION</p> <ol style="list-style-type: none"> 1. Arrange all the ingredient on a dish. 2. Top with peanut sauce. 	Ingredients	unit	A	B	C	TOTAL		
	BUTCHERY							
	VEGETABLES							
	Sweet potato	kg	0.1				0.1	
	Red onion	nos	1				1	
	Bean curd	nos			1		1	
	Cucumber	kg			0.05		0.05	
	Jicama	kg			0.05		0.05	
	Bean spout	ks		0.02	0.03		0.05	
	Chinese chive	kg		0.02			0.02	
	Potato	nos			1		1	
	FRUITS							
	Lime	nos	1				1	
	HERBS							
	DAIRY PRODUCT							
	DRY STORE							
	Dried chili	nos	1				1	
	Ground peanut	kg	0.06				0.06	
	Light soy sauce	tbsp	1				1	
	Salt	kg	AN				AN	
Sugar	kg	AN				AN		
Flour	kg		0.1			0.1		
Baking powder	tsp		1			1		
Egg	nos		1	1		2		
Tamarind	kg	0.02				0.02		
OTHERS								
Water	L	0.3	0.1			0.4		
Presentation								
Arrange all the ingredient on a dish. Top with peanut sauce.								



授課教師資料



創意西餐製作


Menu 2 - Starter									
Lamb Kofta		Pax : 2							
<p><u>Description:</u> Minced Lamb ball kebab served with a spicy tomato sauce, mint and lemon yogurt dip. Served on a bed of mix salad</p>									
Description									
<p>A - PREPARE THE MINCED MEAT</p> <ol style="list-style-type: none"> 1. Debone and remove the fat of the lamb shoulder. 2. Cut the lamb shoulder in small pieces, Put it in the food processor and blend for 1 min. Add the chili, the coriander, the goat cheese... 3. Take the minced meat and shape it like a ball, put them on a stick or not. 4. Put the Lamb on a tray add some olive oil and roast it in the oven at 160 °C. 5. Slice the mix salad. Cut the cherry tomatoes in half for decoration. <p>B - SPICY TOMATO SAUCE</p> <ol style="list-style-type: none"> 1. Cook the tomatoes in the tomato coulis with the red capsicum and a chili padi. 2. Blend it, add seasoning and taste. <p>C - MINT AND LEMON YOGURT SAUCE</p> <ol style="list-style-type: none"> 1. Chop the mint and add it to the yogurt, add some lemon juice 2. Add seasoning and taste. 		Ingredients	u n i t	A	B	C	T O T A L		
		BUTCHERY							
		Lamb shoulder	nos	0.25				0.25	
		VEGETABLES							
		Onion	nos	0.5				0.5	
		Garlic	nos	3				3	
		Chili	nos	1				1	
		Chili padi	nos		1			1	
		Tomato	nos		1			1	
		Mix lettuce	pkt	0.5				0.5	
		FRUITS							
		Lemon	nos		1	0.5		1.5	
		HERBS							
		Mint	pkt			0.2		0.2	
		Coriander	pkt	0.2				0.2	
DAIRY PRODUCT									
Goat cheese	kg	0.15				0.15			
Yogurt	kg			0.3		0.3			
DRY STORE									
Tomato coulis	kg		0.2			0.2			
salt	gm	an	an	an		an			
pepper	gm	an	an	an		an			
<p>* Presentation Spread the salad in the middle of the plate to get some volume. Add the Minced lamb ball on the top of the salad Add the spicy tomato sauce and the mint yogurt on both side of the plate.</p>									

Menu 2 - Soup								
Roast Pumpkin Soup		Pax : 2						
<u>Description:</u> A flavorfull roast pumpkin soup Served with a safran and garlic cream.								
Description								
A - PREPARE THE SOUP 1. Clean and peel the vegetable. 2. Cut the pumkin into segment, sprinkle some olive oil and roast it in the oven at 180°C until golden brown and soft. 3. Once is cook just blend the soup and add a bit of cream and butter. Taste and check the seasoning.		Ingredients	u n i t	A	B	C	T O T A L	
		BUTCHERY						
B - SAFRAN AND GARLIC CREAM 1. Cook the cream with the garlic and safran (low fire) 2. When its cook, blend the cream 3. Add seasoning and taste.		VEGETABLES						
		Pumpkin	nos	0.5			0.5	
		Potatoes	nos	1				1
		onion	nos	1				1
C - DECORATION 1. Prepare the chervil		Garlic	nos	4	4		8	
		HERBS						
		Chervil	pkt			0.1		0.1
		DAIRY PRODUCT						
		Butter	kg	0.05			0.05	
		Cream	L	0.1			0.1	
		DRY STORE						
		safran	g		0.1			0.1
		Olive oil	L	0.1				0.1
		Salt	kg	an	an		An	
		Pepper	kg	an	an		An	
<u>* Presentation</u> Pour the pumpkin soup in the plate Sprinkle the cream oil on the top, Garnish with chervil in the middle of the plate.								

Menu 2 - Main course							
<p style="color: red; text-align: center;">Spices glazed Duck breast served with coriander couscous</p>		<p style="text-align: center;">Pax: 2</p>					
<p>Description: Flavorfull spices roast duck breast Served on a top of coriander and shallot couscous</p>							
Description							
<p>A - PREPARE THE DUCK BREAST</p> <p>1. Remove the excess of fat and score the fat (thin slice).</p> <p>2. let it rest in the chiller.</p>							
<p>B - MAKE THE COUSCOUS</p> <p>1. In a pot cook the shallot the curry leaf and lime leaf, let it cook for a while and add some coriander seed. When the garlic is soft add the couscous and let it cook while stirring for 30 seconds.</p> <p>2. Add the same amount of stock or water for the same amount of couscous (1 cup / 1 cup).</p> <p>3. let it cook on a the side out of the fire until the couscous absorb all the liquid. then add the chop coriander.</p>							
<p>C - COOK THE DUCK BREAST</p> <p>1. Warm the pan on high fire and add the duck breast skin side first immediatly reduce the fire to low fire and let the fat melt and the skin become nice golden brown and crispy.</p> <p>2. When it s done turn the duck over and cook it in the oven for 10 min at 170 °C.</p> <p>3. when its nearly done brush the skin with a mixture of honey, spices and balsamic vinegar.</p>							
		Ingredients	u n i t	A	B	C	T O T A L
		BUTCHERY					
		Duck breast	s	1			1
		VEGETABLES					
		Garlic	s		2		2
		Shallot	no		2		2
		Curry leaf	s		5		5
		FRUITS					
		Orange	s			1	1
		HERBS					
		Coriander	pkt		0.2		0.2
		Thyme	pkt			0.1	0.1
		DAIRY PRODUCT					
		Butter	kg		0.1	0.1	0.15
		DRY STORE					
		EV olive oil	L		0.1		0.05
		Salt	kg	an	an	an	an
		Pepper	kg	an	an	an	an
		Coriander seed	kg	0			0
		Honey	kg			0.05	0.05
		Couscous	kg		0.2		0.15
<p>* Presentation Pull the couscous in the middle of the plate. Serve the slice duck breast on the top of the couscous. Garnish with thyme.</p>							

Menu 6 - Starter								
Soft boiled eggs served on a bed of spinach with mornay sauce		Pax : 2						
Description: Soft boiled eggs served with pan fried spinach and top with a cheesy bechamel sauce								
Description								
A. SOFT BOILED EGGS 1. Boiled the eggs in salted water with vinegar for 4 min and refresh immediately in ice water. 2. Remove the shell of the eggs.		Ingredients	u n i t	A	B	C	D	T O T A L
		VEGETABLES						
		Spinach	kg		0.1			0.1
		Garlic	nos		5			5
		HERBS						
		Thyme	pkt				0.1	0.1
		DAIRY PRODUCT						
		milk	L			0.4		0.4
		Butter	g			30		30
		Mozarella cheese	g			40		40
		Egg	nos	2		2		4
		Cream	L			an		an
		DRY STORE						
		white vinegar	L	an				an
		Flour	gm			30		30
		olive oil	gm					0
		salt	gm	an	an	an		an
		pepper	gm			an		an
D. FINISHING 1. Place the spinach in a middle of a plate or a tray, place the soft boiled eggs on the top and finally the mornay sauce to cover the eggs and the spinach.								
* Presentation Served the eggs hot in the tray or the plate immediately.								

Menu 6 - Soup									
Sea-food chowder		Pax : 2							
Description: A generic name for a wide variety of seafood and/or vegetable thickened soups									
Description									
A. PREPARE THE FISH AND SEA-FOOD 1. Clean properly and cut the fish the sea-food. 2. When the fish stock is cook strain it, and keep it warm. B. COOK THE SOUP 1. In a large soup kettle or stockpot, cook bacon over medium heat until crisp. Remove with a wooden spoon to paper towels; reserve drippings. Saute onions, garlic celery in drippings until tender. Add potatoes and water; bring to a boil. Cook for 10 minutes. 2. Add the scallops, prawn, squid, dory fish. Cook for 10 minutes . 3. Add the butter, salt, parsley and curry powder. Stir in milk and evaporated milk; heat through. Garnish with bacon. C. DECORATION 1. Serve it on the plate and add a bit of chervil .		Ingredients		u n i t	A	B	C	T O T A L	
		BUTCHERY							
		Beef bacon	g	0.1				0.1	
		Prawn	nos	4				4	
		scallops	nos	2				2	
		Dory fish	g	150				150	
		squid	nos	1				1	
		VEGETABLES							
		Garlic	nos		3			3	
		onion	nos		0.5			0.5	
		Celery	stm		0.5			0.5	
		leek	nos		0.5			0.5	
		potato	nos		1			1	
		HERBS							
		chervil	pkt			0.1		0.1	
DAIRY PRODUCT									
butter	nos		3			3			
milk	L		0.1			0.1			
DRY STORE									
Evaporated milk	can		0.5			0.5			
curry powder	tsp		1			1			
Salt, Pepper	kg		an			an			
* Presentation									
Pour the soup in the plate									
Garnish with chervil in the middle of the plate.									

Menu 6 - Main course		TAYLOR'S UNIVERSITY						
Red snapper, hollandaise sauce, Spices pumpkin purée		Pax : 2						
<p>Description:</p> <p>Pan sear red snapper served with a citrus hollandaise sauce, spices pumpkin purée and braised turnip</p>								
Description								
<p>A. PREPARE THE RED SNAPPER</p> <p>1. Clean the fish, make sure there is no scale. Filet and portion the fish.</p> <p>2. Pan fried the fish in olive oil skin side first (3 min) flip it over and finish cooking (2 min).</p>		Ingredients	u n i t	A	B	C	D	T O T A L
		BUTCHERY						
		Red snapper (small)	nos	1				1
		VEGETABLES						
		Garlic	nos		5			5
		Potato	nos		1			1
		Pumpkin	nos		0.25			0.25
		Turnip	nos			0.5		0.5
		FRUITS						
		Lemon	nos				1	1
		HERBS						
		chervil	pkt				0.1	0.1
		DAIRY PRODUCT						
		Cream	L		an			an
		Egg	nos				2	2
		Butter	g		20	20	125	165
		DRY STORE						
		Cinamon powder	g		5			5
		Olive oil	L	an				0
		honey	kg			0.03		0.03
		cumin powder	g		5			5
		fennel powder	g		5			5
		Star anis	nos			2		2
<p>C. BRAISED THE TURNIP</p> <p>1. Clean, peel and cut the turnip in big slice, put them in a pan with star anis, honey, butter and water. Cover the pan with aluminium foil, cook in the oven (160°C) until soft</p>								
<p>D. HOLLANDAISE SAUCE</p> <p>1. Clarify the butter first, then in a mixing bowl over waterbath mix the 2 egg yolk with one tablespoon of water and one tablespoon of lemon juice, whip until thick.</p> <p>2. When is thick add the clarified butter slowly out of the fire.</p>								
<p>* Presentation</p> <p>Pull the pumpkin puree on the plate, place the turnip in the middle, add the red snapper on the top</p> <p>Garnish with the hollandaise sauce around, a lemon segment and chervil.</p>								

四、意見反應分析與改進建議

(一) 活動滿意度分析

1. 法式麵包製作

題項	類別	滿意程度					平均數
		非常滿意 5	滿意 4	尚可 3	不滿意 2	非常不滿意 1	
1. 講師講授內容與本次主題相關性		29	25	4			4.43
2. 講師表達能力與講解清晰度		30	28	0			4.52
3. 講堂資料呈現完整度		35	21	2			4.57
4. 本活動對提升教學/學習效益		31	24	3			4.48
5. 承辦單位整體規劃		35	20	3			4.55
整體滿意度平均：		4.51					

2. 馬新特色料理製作

題項	類別	滿意程度					平均數
		非常滿意 5	滿意 4	尚可 3	不滿意 2	非常不滿意 1	
1. 講師講授內容與本次主題相關性		30	15	2			4.60
2. 講師表達能力與講解清晰度		38	9	0			4.81
3. 講堂資料呈現完整度		40	6	1			4.83
4. 本活動對提升教學/學習效益		41	5	1			4.85
5. 承辦單位整體規劃		40	7	0			4.85
整體滿意度平均：		4.79					

3. 創意西餐製作

題項	類別	滿意程度					平均數
		非常滿意 5	滿意 4	尚可 3	不滿意 2	非常不滿意 1	
1. 講師講授內容與本次主題相關性		32	15	0			4.68
2. 講師表達能力與講解清晰度		40	7	0			4.85
3. 講堂資料呈現完整度		42	5				4.89
4. 本活動對提升教學/學習效益		43	4	0			4.91
5. 承辦單位整體規劃		42	5	0			4.89
整體滿意度平均：		4.85					

4. 總活動滿意度分析

題項	類別	滿意程度					平均數
		非常滿意 5	滿意 4	尚可 3	不滿意 2	非常不滿意 1	
1. 講師講授內容與本次主題相關性		120	32	0			4.68
2. 講師表達能力與講解清晰度		135	17	0			4.85
3. 講堂資料呈現完整度		140	12				4.89
4. 本活動對提升教學/學習效益		145	7	0			4.91
5. 承辦單位整體規劃		149	3	0			4.89
整體滿意度平均：		4.84					

(二)開放性意見彙整：

A. 我會將學習內容應用在

1. 餐飲烘焙技術專業上
2. 應用於未來就業職場
3. 可以學習不同國家的料理
4. 和同學一起去馬來西亞學習新穎的料理
5. 會運用於餐飲廚藝課程上
6. 活動很精彩
7. 很有趣
8. 活動很豐富
9. 內容很有意義,下次要再參與
10. 馬來西亞文化真得是多元文化休閒觀光景點

(三)改進建議：

1. 希望學校多辦理相關的活動~非常有意義
2. 場次太少~都排不到~

(四)照片成果集錦

Taylor's University, Hotel School(1) Chef. Bala Murali Nanda(2) Chef. Frederic Raymond Paul Cerchi(3)尊孔中學餐飲管理科梁振安老師三位教師來訪環球科大進行餐飲課程協同教學





Chef. Frederic Raymond Paul Cerchi 老師—法國麵包製作授課實況



Chef. Frederic Raymond Paul Cerchi 老師—法國麵包製作授課實況



Chef. Frederic Raymond Paul Cerchi 老師—法國麵包製作授課實況



Chef. Frederic Raymond Paul Cerchi 老師—法國麵包製作授課實況



尊孔中學餐飲管理科梁振安老師—馬新特色料理授課實況



尊孔中學餐飲管理科梁振安老師—馬新特色料理授課實況



Chef. Bala Murali Nanda 老師—創意西餐料理授課實況



Chef. Bala Murali Nanda 老師—創意西餐料理授課實況



Chef. Bala Murali Nanda 老師—創意西餐料理授課實況



校園留影



意見交流

環球科技大學102-103年度教學卓越計畫 活動企劃書

壹、工作項目基本資料：

工作編號	E-2-1-2	預訂完成日期	103 年 10 月 30 日
工作名稱	辦理海外教育合作協同教學-韓國又松大學		
負責人姓名	丁一倫 洪珈亦	校內分機/手 機	
E_MAIL	allen.ding@msa.hinet.net anne@twu.edu.tw		

貳、工作內容描述：

一、現況或需求分析：

- (一)為加強與海外教育合作夥伴學術交流及提供其專業課程規劃經驗，並營造學習互訪的環境。
- (二)邀請韓國又松大學教授至本校指導「韓餐禮儀與文化」、「廚藝製作」及「烘焙食品製作」等，透過理論及實作課程，讓觀餐系師生皆能瞭解韓國餐飲文化。
- (三)提昇本系海外學術交流，擴展師生國際視野及強化教師教學及研究能量。

二、辦理單位：觀光與餐飲旅館系

三、活動地點：環球科技大學務實樓HS506/ EZ100/CA101專業教室

四、預計參加人數：200人次

五、活動時間：

活動日期	活動名稱	責任者	備註
103.10.16~20	辦理海外教育合作協同教學	丁一倫	

六、活動時程及任務分配表：

預定完成日期	任務名稱	責任者	備註
103.10.30	辦理海外教育合作協同教學	丁一倫	
103.06.10	前置作業-	丁一倫	

	與韓國又松大學協調活動細流		
103.06.15	協同技術課程及授課教師擬定	丁一倫	
103.10.16~20	參與學生之安排與活動執行	洪珈亦	

七、重要工作查核點：

查核日	查核內容	備註
103.03.31	提出活動簽呈、企劃書及核定清單	在 3 月 31 日前
103.10.16-20	辦理計畫之活動、競賽或課程前置作業-與韓國又松大學協調活動細流	依計畫規定期限之前 6 月中旬
103.10.30	提出核銷憑證及成果	活動結束 7 日內
103.10.30	完成核銷	活動結束 14 日內

(各項工作重要檢核日程請自訂，唯上表中已明列者請勿刪除)

八、預期成效：

- (一)提升教師教學質量與加強與姐妹校的實質合作。
- (二)擴展學生國際視野，提升學生參與協同教學學生人次達200人以上。

九、預估執行經費：
