

## **Exploring Consumer's Insights in a Unique Thai Language Course Characteristics: The Application of Conjoint Analysis Technique**

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### **Abstract**

*Our research aims to explore a unique package of a Thai language course in foreigners' perceptions by using Conjoint Analysis technique. This study is a descriptive research in which Conjoint Analysis technique is applied to give a greater understanding of the more desired course for foreigners. The research instrument used in the research is self-administered questionnaires. Prior to the survey, a focus group was conducted to obtain a comprehensive representation of factors to be included. Our findings show that consumers perceive price, number of teaching hours, and the class size of a Thai language course as the most important factors in choosing a course. In conclusion, the ideal Thai language course package should be comprised of 40 hours of private classes at a downtown location, and with a price of 4,000 baht.*

**Keywords:** Thai Language, Conjoint Analysis, Focus Group, Statistical Technique

### **1. Introduction**

Thai is spoken by the vast majority of the population in Thailand and is the official national language. Thai belongs to the Sino-Tibetan group of languages and shares some features with Chinese. The original tonal, monosyllabic language is augmented with Mon and Khmer words. Later, Thai absorbed polysyllabic Sanskrit and Pali words (Moore & Rodchue 2005). Burusphat (1991) also mentions that Thai is an isolating language, a language that each word consists of just one morpheme and cannot be further dissected into smaller parts. Contemporaneously, Thailand has one of the world's fastest growing economies, driven to a large extent through investment by foreign multinational firms. Moreover, there are no laws in Thailand restricting gender-based discrimination or requiring equal opportunity language usage on the part of private employers (Lawler & Bae 1998). Notwithstanding, the working environment in Thailand often requires communication in Thai to enhance mutual-understanding or to sufficiently comprehend Thai culture.

According to the statistics from the Immigration Bureau of Thailand (Table 1), in 2009, more than two million foreigners came to Thailand for traveling, business purposes, and other reasons. Due to the high number of foreigners temporarily living in Thailand, it is plausible that these foreigners would like to take some Thai language courses.

However, the most preferred option of a Thai language course from a foreigner's perspective is still uninvestigated. As a result, the objective of this research is to explore the unique option of a Thai language course in foreigners' mind by using Conjoint Analysis technique.

**Table 1: the Number of Foreigner Arrives to Thailand in Year 2009**

Nationality	Arrival		
	Tourist Visa	Business Purpose and Other Reasons	Total
American	16,436	31,821	48,257
Chinese	485,445	23,524	508,969
German	23,032	28,270	51,302
Indian	254,714	14,146	268,860
Japanese	8,426	25,112	33,538
Other	1,125,091	293,043	1,418,134
<b>Total</b>	<b>1,913,144</b>	<b>415,916</b>	<b>2,329,060</b>

Data Source: Immigration Bureau of Thailand

## 2. Literature Reviews

### 2.1 Characteristics of the Buyer and Language Course

Li (2007) describes that demographic characteristics, such as age, sex, marital status, income, occupation, and education, are most often used as the basis for market segmentation. Especially when used to identify target markets, basic demographic analysis is used for two reasons: to identify population characteristics in order to determine just who the potential customer is, and to serve as a means of locating geographic areas where the largest number of potential customers reside. As the part of buyers' characteristics, gender is quite frequently a distinguishing segmentation variable (Gopinath 2004). Moreover, Kotler and Keller (2006) reports that some products have been positioned as more masculine or feminine. Simultaneously, age is also one of the most important characteristics of the buyer. According to Proctor (1996), age can affect the demand for product and service. Hawkins, Best and Coney (2000) state that, by the various degree of demand, age can also affect the buyer's consumption pattern. For this research, the authors take into consideration the respondent's nationality as well. Marzo-Navarro, Pedraja-Iglesias and Rivera-Torres (2010) claim that differences in the nationality of a citizen allows for detectable differences in the intensity of the determinants of the satisfaction that is experienced.

For a language course, the determining factors are typically price, location (where the language course available), schedule, and class size. Simcock, Sudbury, and Wright (2006) mention that when there is no information, consumers tend to use price as a sign to judge the quality. The class schedule is consistently a primary consideration for any language course. Every language course uses a number of hours as a smallest element to determine the length of a course. In addition, for the class size, a research by Scheck, Kinicki and Webster (1994) finds that a large class size is found to have a negative or inconsequential effect on student performance. Conversely, a small class size improves student performance. Namely, fewer students mean more attention from the instructor, calmer classroom setting, and higher test scores as a result (Kamuche 2006).

## 3. Research Design

A study of the package characteristics of a Thai language course for foreigners is a descriptive research using quantitative data to which Conjoint Analysis technique is applied to give us a greater understanding of the desired Thai language course for foreigners. The techniques used in the research such quantifiable data is a sample survey where data will be collected a representative sample of the population via a questionnaire. The research instrument used in the research is self-administered questionnaires. The questionnaires would be handed out to respondents who would answer close end questions. Notwithstanding, before doing surveying, the qualitative method is applied to see the clear picture of factors to be put in the survey item. First of all, a focus group interview is conducted at Assumption University, one of the international universities in Bangkok, Thailand. The total of six non-Thai respondents, regardless of nationality, is included in the focus group. The gender is mixed and all of them are at least 17 years old or over. The international respondents are currently studying or working in Thailand. Their opinions will be tape-recorded and they will get the incentives in return. One important task of the focus group is to let the respondents decide which four factors would influence their choice for choosing a language school. Since there are six focus group participants there are a total of 24 votes. The result from the focus group shows that all participants perceive quality as one of the most important factors. Notwithstanding, the respondents actually do not care much about the reputation of the language school, even this may be an important criteria to examine the quality of the school.

For them, quality can be assessed only after they have taken a language course for awhile. In addition, the participants of the focus group find that even a high-educated teacher cannot guarantee the quality of the language course. Due to its difficulties in measuring, quality therefore cannot be included as a factor. Nonetheless, with needs for high quality Thai language course, we find that the respondents would like to get a free trial lesson. The other important factor for the respondents is the location of the language school. Most of the respondents do not like to travel so far. But, it also depends on the schedule. For instance, if they go to study on the weekend, they do not mind too much to travel. In contrast, but if the class is on weekday, they prefer that the language school should be very close to them. Furthermore, course price is necessary for most of the respondents. The respondents perceive that the higher the price, the more teaching hours to be available. Finally the respondents also found that the class size is important.

### 3.1 Sampling process

The population for our study includes all the foreigners working or studying in Bangkok aged between 17-49 years, who have lived in Bangkok at least one month. In selecting the sampling method, non-probability sampling is firstly taken and then the quota sampling is secondly used to identify the stratum based on occupation such as working people or students. Due to the limitation of time and political turmoil in Bangkok that may prevent foreigners to come to Bangkok, ergo, the number of sample will be at least 60 foreigners. In unison, the sample will be divided into 30 people from workers and 30 people from international students. Interviewers will individually approach individual foreigners with self-administered questionnaires which they will be asked to fill on their own.

### 3.2 Conjoint analysis

Conjoint analysis is used to study the factors that influence consumers' purchasing decisions. Ipso facto, consumers typically do not have the option of buying the product that is best in every attribute such as price, color, and so on. Consumers are forced to make trade-offs as they decide which products to purchase. We can say that the process in conjoint analysis is quite complicated. Malhortra (2007) has briefly mentioned about the conjoint analysis process by stating that, firstly in formulating the conjoint analysis problem, the researcher must identify the attributes and attribute levels to be used in constructing the stimuli. Secondly, in order to construct the stimuli, two broad approaches are available: the pair-wise approach and the full-profile procedure. In the pair-wise approach, the respondents evaluate two attributes at a time until all the possible pairs of attributes have been evaluated. In the full-profile approach, full or complete profiles of brands are constructed for all the attributes.

Thirdly it has to be decided on the form of input data, which can either be metric or non-metric. For non-metric data, the respondents are typically required to provide rank order evaluations. For the pair-wise approach, respondents rank all the cells of each matrix in terms of their desirability. While for the full-profile approach, they rank all the stimulus profiles. If the metric form is chosen, the respondents provide ratings, rather than rankings. Fourthly a conjoint analysis procedure has to be selected. The basic conjoint analysis model may be represented by the following formula:

**Figure 1: Conjoint Formula, Adopted from Malhortra (2007)**

$$U(X) = \sum_{i=1}^m \sum_{j=1}^{k_i} \alpha_{ij} x_{ij}$$

Where

$U(X)$  = overall utility of an alternative

$\alpha_{ij}$  = the part-worth contribution or with the  $j^{\text{th}}$  level of the  $i^{\text{th}}$  attribute

$k_i$  = number of levels of attribute  $i$

$m$  = number of attributes

$x_{ij}$  = 1 if the  $j^{\text{th}}$  level of the  $i^{\text{th}}$  attribute is present, 0 otherwise

And finally, the results of the conjoint analysis have to be interpreted. Therefore, it is helpful to plot the part-worth functions. And finally, reliability and validity should be assessed.

## 4. Data Analysis and Results

### 4.1 Description of the Sample

Most of the respondents are between 23 to 29 years old (50%), followed by 18 to 22 years old (26.7%), 40 to 49 years old (15.0%), and finally 30 to 39 years old (8.3%) of respondents.

Among the respondents, there are 68% male and 32% female. Most of the respondents are Chinese (15%), following by American (10%), Vietnamese (8.3%), and Indian (6.7%). The result shows that 48.3% of the respondents staying in Thailand are students, 38.3% are workers, and 6.7% of them embraced two roles as student and worker (that is, they study and work simultaneously).

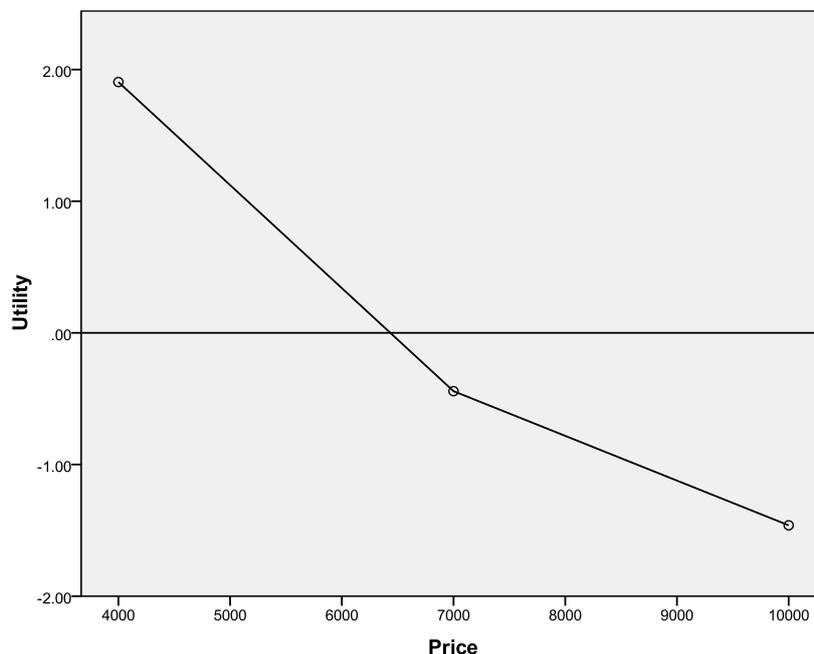
**Table 2: Sample’s Description**

Demographic	No. (60)	%			
<b>Gender</b>			<b>Nationality</b>		
Male	41	68.3	Chinese	9	15.0
Female	19	31.7	American	6	10.0
			Vietnamese	5	8.3
			Indian	4	6.7
<b>Age</b>			Danish	3	5.0
18-22	16	26.7	French	3	5.0
23-29	30	50.0	Japanese	3	5.0
30-39	5	8.3	Myanmar	3	5.0
40-49	9	15.0	British	2	3.3
<b>Reason of Stay</b>			Filipino	2	3.3
Work	23	38.3	German	2	3.3
Study	29	48.3	Iranian	2	3.3
Work and Study	4	6.7	Swedish	2	3.3
Other	4	6.7	Other	14	23.5

**4.2 Overall model**

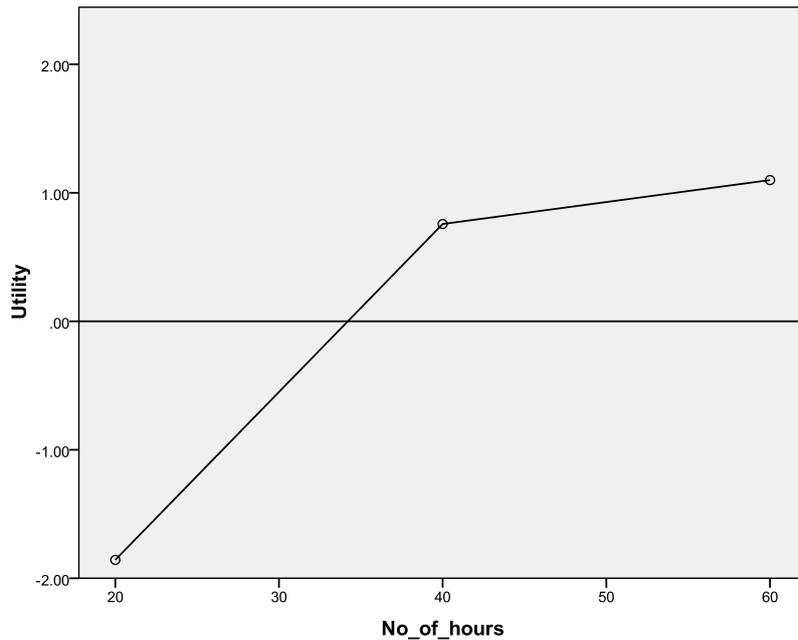
With the help from part-worth functions, we can analyze the utility scores graphically. For the overall model we find that, for most of the respondents, the lower the price, the more usefulness they perceive. This is actually common sense, since most of the consumers appreciate a cheaper product, except for specialty goods where a higher price is necessary to communicate status. From figure 2, since the drop of utility from 4,000 baht to 7,000 baht is much higher than the drop from 7,000 baht to 10,000 baht we can conclude that a price of 4,000 baht gives the respondents more usefulness. Notwithstanding, this price of language course to be offered, for some of the language schools, it is unacceptable due to low profit.

**Figure 2: Part-worth Functions for Price**



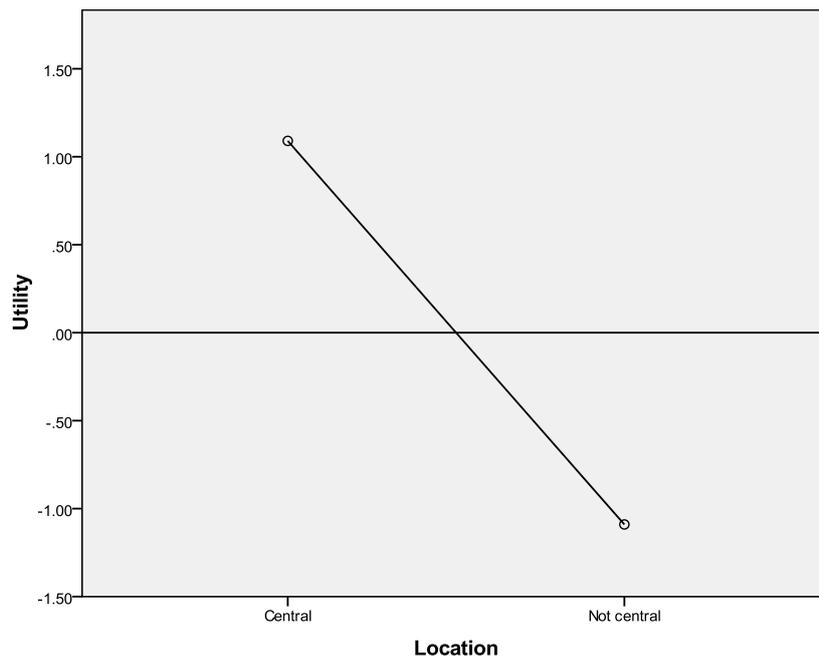
Next, for the number of teaching hours per Thai language course, we find that the utility increases with number of teaching hours. It is that, in consumers’ mind, they want more hours of teaching for the lower price. From figure 3, the highest utility gap is clearly between 20 and 40 hours. The rise of utility between 40 and 60 hours is very little. This clearly proves that language schools should offer a Thai language course for foreigners with 40 teaching hours.

**Figure 3: Part-worth Functions for Number of Hours**



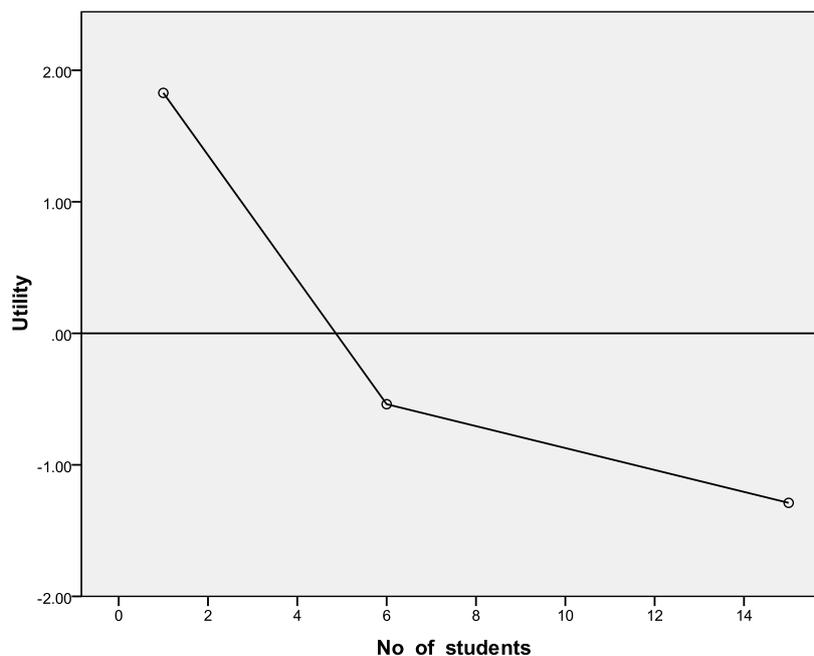
For the location, there are only two attribute levels defined central and not central (corresponding with downtown and uptown). From figure 4, it is obviously that respondents prefer a location in downtown.

**Figure 4: Part-worth Functions for Location**



From figure 5, we find that the respondents prefer fewer students in the class. As we can see, the drop in utility from one to six students is quite large. Therefore, a very low number of students in a Thai language course can highly increase its attractiveness for course buyers. It may be interesting, for the future research, to investigate the impact of a language class consisted of two or three students on the consumer's preference since a private class is quite expensive.

**Figure 5: Part-worth Functions for Number of Students**



**5. Conclusion and Recommendation**

After we analyze the part-worth functions of the attributes, we later can compare the relative importance of each attribute by measuring and comparing the utility ranges. From figure 6, we can see the overall relative importance of three attributes such as price (28.52%), number of hours (27.29%), and number of students (27.37%), is approximately the same. Ergo, when constructing a Thai language course package, the price, the number of hours, and the number of students should be consider firstly before the location. This also implies that a school can still be attractive to the customers even though they are not located in downtown.

**Figure 6: Relative Importance of the Attributes**



Furthermore, we can group the respondents depended on the different demographic characteristics. The constant factor mentioned in the table is based on price of 4,000 baht, 20 teaching hours, uptown location, and a class size of one student (private class). We will only highlight the specialties of those demographic groups that seem to be different significantly from the overall. Notwithstanding, for some groups, the sample size is quite low and therefore the accuracy may be not high and there may be low sample size bias. We recommend that in a further study, this problem should be solved by increasing the sample size.

**Table 3: Model Comparison - Overall and Age Groups**

Factor	Overall		Age			
	Overall	Overall and Holdouts	17 to 22 Years Old	23 to 29 Years Old	30 to 39 Years Old	40 to 49 Years Old
R-square	.183	.161	.142	.246	.287	.236
Number of Respondents	60	60	16	30	5	9
Constant	5.791	5.691	5.040	6.490	4.393	5.574
4,000 Baht	1.905	2.028	.546	2.318	2.040	2.870
7,000 Baht	-.443	-.512	.206	-.576	-.993	-.852
10,000 Baht	-1.462	-1.515	-.752	-1.742	-1.047	-2.019
20 Hours	-1.857	-1.895	-2.223	-1.362	-2.460	-2.519
40 Hours	.757	.811	.938	.506	1.853	.667
60 Hours	1.099	1.084	1.285	.857	.607	1.852
Downtown	1.090	1.148	.840	1.038	2.250	1.065
Uptown	-1.090	-1.148	-.840	-1.038	-2.250	-1.065
1 Student (Private Class)	1.828	1.712	2.133	2.274	.100	.759
6 Students	-.539	-.514	-1.027	-.714	.600	.278
15 Students	-1.289	-1.199	-1.106	-1.560	-.700	-1.037
Importance of Price	28.52%	29.90%	12.64%	33.15%	27.38%	38.32%
Importance of Teaching Hours (Schedule)	27.79%	27.94%	37.37%	19.48%	33.02%	33.62%
Importance of Location	16.32%	16.92%	14.12%	14.84%	30.20%	14.22%
Importance of Class Size	27.37%	25.24%	35.87%	32.53%	9.40%	13.84%

The importance scores for each age group differ widely. We can see that 17 to 22 years old group cares very much about the number of teaching hours (37.37%) and the class size (35.87%) but do not care much about the price (12.64%) and the location (14.12%) respectively. This group gives much lower utility to the 4,000 baht course (.546) and even gives positive utility value for the 7,000 baht course (.206). We may assume that teenager is still supported by their parents and ergo do not realize that much about the value of money. But surprisingly, it is not obvious that the older the age group, the higher value of price's importance. For example, the respondents aged between 23 and 29 years old give the importance value of the price as 33.15%; while, the respondents aged between 30 and 39 years old give the importance value of the price as 27.38% only. The group of 30 to 39 years old gives the highest importance value for location as 30.20%. We perhaps assume that since this age group is may busy with their jobs, they therefore prefer a central location due to convenient transportation. For the age groups of 30 to 39 years old and 40 to 49 years old, they do not perceive the class size is important when compared to the other groups (9.40% and 13.84% respectively). And finally, for the age group of 30 to 39 years old prefers a class size of six students (utility score = .600), while the other age groups prefer private class (utility score: 2.133, 2.274, and .759).

In conclusion, for the preferable Thai language course for foreigners, we can conclude that the most important attributes are price (29.90%), number of teaching hours (27.94%), and the class size (25.24%); while, location is the least important attribute (16.92%). We find that the ideal Thai language course package should contain of 4,000 baht price, 40 hours of private class, and take place in downtown. We also so recommend that, for a further study, researchers should increase the number of attribute levels (e.g. the level of teaching hours consisted of 20, 30, 40, 50, and 60 hours). Moreover, due to the overall model we find that the respondents do highly appreciate a language course comprised of 4,000 baht price and 40 teaching hours; but however, it is implausible for many schools to offer such a cheap package like this (private class with 100 baht per teaching hour). The institutions therefore should use their own judgment and marketing strategies in order to attract more students while are still able to offer the reasonable price language course with acceptable profit. Curiously, from the focus group we find that the sample is really interesting in a free trial Thai language lesson. As a result, the language schools should offer free trial course (just only a few hours) to attract more customers and gain a competitive advantage as well.

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### Appendix: Questionnaire and Stimuli

#### Course ratings

Please rate the following courses on a linear scale from zero (the worst possible package) to ten (the best possible package). Please note that any value between zero and ten with decimal (e.g. 1.2, 3.5, 7.8, and etc.) is possible.

Course Number	Rating
1	
2	
3	
4	
5	
6	

7	
8	
9	
10	
11	
12	

These are the stimuli created with orthogonal design (card 10 till 12 are the holdouts):

<b>Course 1</b>	
Price	7,000 Baht
Number of Hours	20 Hours
Location	Uptown (not Central)
Class Size	6 Students
<b>Course 2</b>	
Price	10,000 Baht
Number of Hours	20 Hours
Location	Downtown (Central)
Class Size	15 Students
<b>Course 3</b>	
Price	10,000 Baht
Number of Hours	60 Hours
Location	Downtown (Central)
Class Size	6 Students
<b>Course 4</b>	
Price	4,000 Baht
Number of Hours	40 Hours
Location	Downtown (Central)
Class Size	6 Students
<b>Course 5</b>	
Price	10,000 Baht
Number of Hours	40 Hours
Location	Uptown (not Central)
Class Size	1 Student (Private Class)
<b>Course 6</b>	
Price	4,000 Baht
Number of Hours	60 Hours
Location	Uptown (not Central)
Class Size	15 Students
<b>Course 7</b>	

Price	7,000 Baht
Number of Hours	60 Hours
Location	Downtown (Central)
Class Size	1 Student (Private Class)
<b>Course 8</b>	
Price	7,000 Baht
Number of Hours	40 Hours
Location	Downtown (Central)
Class Size	15 Students
<b>Course 9</b>	
Price	4,000 Baht
Number of Hours	20 Hours
Location	Downtown (Central)
Class Size	1 Student (Private Class)
<b>Course 10</b>	
Price	7,000 Baht
Number of Hours	60 Hours
Location	Uptown (not Central)
Class Size	1 Student (Private Class)
<b>Course 11</b>	
Price	10,000 Baht
Number of Hours	20 Hours
Location	Downtown (Central)
Class Size	6 Students
<b>Course 12</b>	
Price	4,000 Baht
Number of Hours	40 Hours
Location	Uptown (not Central)
Class Size	1 Student (Private Class)