

Course Outline

IS 216 End-User Application Development

Semester 2/2020 (January 20 – May 19, 2021)

Number of credits:	3 credits (3-0-6)
Lecture Time:	Friday, 14.00 – 17.00 hours
Lecture Venue:	Virtual Classroom via zoom https://zoom.us/j/92980687192 Meeting ID: 929 8068 7192 Passcode: 535899
Meeting Platform:	BE Moodle (Enrollment Key: 0358)
Instructor:	Assoc. Prof. Dr. Laddawan Kaewkitipong E-mail: laddawan@tbs.tu.ac.th

Prerequisite: None

Course Description:

Tools or techniques that allow end-users who are not professional in programming to create simple software or to extend existing applications, languages for creating web pages, content management systems, spreadsheet software, database management software, Macro, or other associated tools or techniques.

Course Objectives:

Students are able to use tools or techniques to help non-programmers create simple software or expand existing applications. The developed applications focus on business contexts.

Teaching Assistant: -

Main Texts: Materials from Instructors

.Suggested readings:

- Alexander, M. & Kusleika, D. (2015) Access® 2016 BIBLE: The comprehensive tutorial resource
- Ulrich, L. and Cook K. (2015) Access® 2016 for Dummies
- Harvey, G. (2015) Excel 2016 All-in-one for Dummies
- Frye, C. (2015) Microsoft Excel 2016 Step by Step
- Walkenbach, J. (2015) Excel 2016 Bible

Grading:

Midterm Exams (Access)	20 %
Final Exam (Excel)	20%
Quizzes	30%
Database application Project	20 %
In-class participation	10 %
Total	100%

Tentative class schedule

Session/Date & Time	Topics	Activities/Text & Materials/Media
Week 1 22 January	Introduction Basic Query	Computer Lab
Week 2 29 January	Advanced Query	Computer Lab
Week 3 5 February	Basic Table Design	Computer Lab
Week 4 12 February	Create Report	Computer Lab
Week 5 19 February	More exercises: Report Quiz: 10% (covering query and reports)	Computer Lab
Week 6 26 February	Create Form and Form with sub form - Form controls	Computer Lab
Week 7 5 March	More exercises: Form and Form with sub form Quiz: 5% (covering forms)	Computer Lab
Mid-term Exam Friday, March 12, 2021 : 3.00 - 5.00 PM		
Week 8 19 March	Basic Excel - Format cells - Conditional formatting - Using formula - Tables in excel	Computer Lab
Week 9 26 March	Advanced Excel - Handling data - Checking data types (isnumber, istext, iserror, etc.) - Database functions (Dsum, Dmax, Dmin, etc.) - Lookup (vertically and horizontally) - Index and match	Computer Lab
Week 10 2 April		Computer Lab
Week 11 9 April	Charts	Computer Lab
Week 12 23 April	Quiz1 (10%): Basic and Advanced Excel Skill + Charts Pivot Tables/Chart	Computer Lab
Week 13 30 April	Power BI: Power Query	Computer Lab
Week 14 7 May	Power BI: Power pivot	Computer Lab
Week 15 14 May	Power BI: Power pivot & Dashboard Quiz2 (5%) : Power Query & Power pivot	Computer Lab
Final Exam Saturday, June 5, 2021 : 1.30-4.30 PM		

****** Important Notes******

1. Participation will be **randomly checked by the instructor in the classroom** sometimes by submitting in-class exercise, or by showing solutions to the given exercise in front of the class, for example.
2. The course instructor reserve the right to move around quiz dates. Changes might happen when all materials are not covered according to the above schedule. However, **quizzes cannot be made up. Missing a quiz will result in '0' point** unless there are acceptable reasons and the instructor is notified and approves in advanced.

Expected Learning Outcomes:

	1. Morality and Ethics	Expected Learning Outcomes
N/A	1.1 Possess honesty, sacrifice, self-, social-, and environmental responsibility.	
N/A	1.2 Value “sufficiency” theory and adapt it in life path by adhering to adequacy, rationale, and immunity development.	
●	1.3 Value disciplines, respect, and comply with the rules and regulations of the institution and society at large.	Students show their respect to class rules by submitting all assignments/projects on time
N/A	1.4 Acquire knowledge related to business morality and ethics, and be able to handle ethical dilemma with integrity.	
	2. Knowledge	Expected Learning Outcomes
●	2.1 Acquire knowledge on and understand the important concepts in business management.	Students are expected to gain knowledge on data analysis for business decision-making. This will be measured by Final exam scores which cover using Microsoft Excel to analyze data for business decision making. The students are expected to gain at least 50% of the final exam score
N/A	2.2 Acquire knowledge on and understand the important social and science concepts related to business management.	
●	2.3 Acquire knowledge on and understand the important concepts related to business processes, planning, corporate structures, operations, control, performance evaluation and contingency plan to suit the circumstances.	Students will acquire knowledge on business process through the study of managing (collecting data, querying, and creating reports) business data using Microsoft Access. The students are expected to gain at least 50% of the midterm exam score
N/A	2.4 Acquire the knowledge on academic advancement and professional development in business management including the understanding of the situational adaptability and its impacts on business.	
	3. Intellectual Development	Expected Learning Outcomes

N/A	3.1	Be able to search and process information and utilize various concepts appropriately in a given circumstance in order to obtain relevant information to benefit in the rapidly changing business environment.	
N/A	3.2	Be able to think systematically, rationally and creatively and to integrate knowledge from other disciplines to solve the problems in business and other settings.	
●	3.3	Be able to collectively propose solutions to problems at hand and analyze the impacts of the proposed solutions and be able to choose the solution that is appropriate to a given situation to ensure business competitive advantages.	The students should be able to create a database application that fits to the business requirements and help the business manage their data as well as business processes more efficiently. The students are expected to gain higher than 50% of the assigned Access project
	4. Interpersonal Skills and Responsibilities		Expected Learning Outcomes
N/A	4.1	Be able to work in team, possess interpersonal skills and leadership skills, and be professionally adaptive to a given situation.	
N/A	4.2	Be creative and constructively criticize to solve problem of the team.	
○	4.3	Be responsible in lifelong learning to develop self and professional career.	The students should be able to continue learning from online materials with enough basic skills provided in the class
	5. Quantitative Analysis, Communication and Information Technology		Expected Learning Outcomes
N/A	5.1	Be able to apply mathematics, statistics, quantitative analysis in analyzing and making decisions in business and daily life.	
N/A	5.2	Be able to efficiently communicate in Thai and foreign languages that are relevant in doing business.	
○	5.3	Be able to explain the issues and make the issues clear in verbal or writing, and be able to choose the appropriate pattern of communication for different groups of audience both in business context and in other contexts.	The students should be able to explain to their classmates and the instructor the steps taken to get the required tasks done
●	5.4	Be able to utilize the information technologies or others to support the business operations.	The students should be able to use Microsoft Access and Excel for business purposes. The students are expected to gain at least 50% of both midterm and final exam score

ACADEMIC CALENDAR & HOLIDAY

Semester 2/2020

(January 20 – May 19, 2021)

Activities	Time Period
Classes Begin	January 20, 2021
Add-drop period	January 25 – 29, 2021
Tuition payment period	January 30 – February 2, 2021
<i>Makha Bucha Day*</i>	<i>February 26, 2021</i>
Mid-term Examination Period	March 10 – 16, 2021
Withdrawal period with “W” on record	March 24 – May 6, 2021
<i>Chakri Memorial Day*</i>	<i>April 6, 2021</i>
<i>Songkran Day Festival*</i>	<i>April 12 – 18, 2021</i>
<i>Substitution for Visakha Bucha Day*</i>	<i>April 26, 2021</i>
<i>Coronation Day*</i>	<i>May 4, 2021</i>
<i>Royal Ploughing Ceremony Day*</i>	<i>May 11, 2021</i>
Last day of class	Wed, May 19, 2021
Final exam period	May 20 – June 5, 2021
<i>Visakha Bucha Day*</i>	<i>May 26, 2021</i>
<i>Queen Suthida's Birthday*</i>	<i>June 3, 2021</i>

** Public Holiday, No classes during this period*