



TQF. 3

Bachelor's Degree

Master's Degree

Course Specification

Course Code: ICM1102

Course Title: Introduction to Information Technology

Credits: 3(2-2-5)

Programs: International Business, Tourism Management

Semester: 1 **Academic Year:** 2018

**International College, Suan Sunandha Rajabhat University
(SSRUIC)**

Section 1 - General Information

1. Course code and course title

Course code: ICM1102

Course title (English): Introduction to Information Technology

ชื่อวิชา (ภาษาไทย): เทคโนโลยีสารสนเทศเบื้องต้น

2. Credits

3(2-2-5)

3. Curriculum and course category

3.1 Curriculums: B.B.A. (International Business), B.A. (Tourism Management)

3.2 Course Category:

- General Education Required Course
 Elective Course Others

4. Lecturers

4.1 Lecturer responsible for this course: Mr.Pongrapee Kaewsaiha

4.2 Instructional course lecturer: Mr.Pongrapee Kaewsaiha

5. Contact

Room Number: - Tel.: 081-446-4238 e-mail: pongrapee.ka@ssru.ac.th

6. Semester/Academic year

6.1 Semester: 1 **Academic Year:** 2018

6.2 Number of the students enrolled: 37

7. Pre-requisite course

None

8. Co-requisite course

None

9. Learning center

International College Building, Nakhon-Pathom Education Center,

Room Number: 302

10. Last date for preparing and revising this course

August, 2018

Section 2 - Aims and Objectives

1. Course Aims

At the end of this course students will reach the desired learning outcomes based on five domains, developed from the curriculum specification (TQF2), as follows:

1.1 Morals and Ethics

1.1.1 Learning outcomes to be developed

- 1) To have ethical behavior in using genuine software, applications, and contents.
- 2) To respect the others' copyright and be able to employ fair usage of copyrighted contents in learning.

1.1.2 Teaching Strategies

- 1) Emphasize the proper reference of any content used and fair usage of copyrighted materials. Consider violation such as plagiarism and infringement as majority offence of student behavior.
- 2) Stimulate student participation using interactive media.
- 3) Keep computer lab rules being regulated.

1.1.3 Assessment Strategies

- 1) Assessment rubrics for submissions, both individuals and groups
- 2) Classroom observation
- 3) System log

1.2 Knowledge

1.2.1 Learning outcomes to be developed

- 1) To understand the components of an information technology, their roles in related fields, and in every aspect of life.
- 2) To have updated information about recent information technology that assists in works and studies.

1.2.2 Teaching Strategies

- 1) Use updated information in teaching. Have students learn and retrieve information from world-wide available sources to ensure they get in touch with most recent information technology.
- 2) Make students realize the benefits of using information technology in their future studies and careers, such as spreadsheet and online form.

1.2.3 Assessment Strategies

- 1) Assessment rubrics for submissions
- 2) Quiz results
- 3) Questionnaire results

1.3 Cognitive Skills

1.3.1 Learning outcomes to be developed

To develop problem solving tools using world-wide available information technology.

1.3.2 Teaching Strategies

- 1) Integrate real-world problems with the instruction.
- 2) Use problem-based learning in some topics.

1.3.3 Assessment Strategies

- 1) Assessment rubrics for submissions
- 2) Quiz results
- 3) Questionnaire results

1.4 Interpersonal Skills and Responsibility

1.4.1 Learning outcomes to be developed

- 1) To examine the role of interpersonal skills and responsibility as an aspect of work ethic.
- 2) To develop strategies for improving interpersonal skills and responsibility.

1.4.2 Teaching Strategies

- 1) Design assignments which motivate students to learn from the world-wide sources of information and share opinions with each other.
- 2) Inspire students to continuously improve their IT skills in order to compete in the current digital market.

1.4.3 Assessment Strategies

- 1) Assessment rubrics for assignments
- 2) Classroom observation
- 3) Questionnaire results
- 4) System log

1.5 Numerical Analysis, Communication and Information Technology Skills

1.5.1 Learning outcomes to be developed

- 1) To integrate the use of learning management system (LMS) with the instruction process throughout the course.
- 2) To apply recent information technology including cloud computing to assist in learning process.

1.5.2 Teaching Strategies

- 1) This course integrates the use of Moodle LMS and Google Apps for Education provided and supported by Suan Sunandha Rajabhat University for efficient/robust teaching, learning, communicating, collecting submissions and providing feedback.
- 2) English language exercises consisting grammar, vocabulary, and reading in IT topics are provided.
- 3) Include assignments that facilitate the use of application software for computation and analysis of data.

1.5.3 Assessment Strategies

- 1) Assessment rubrics for submissions
- 2) Automatic quiz scoring
- 3) System log

2. Objectives for Developing/Revising Course (Content/Learning Process/Assessment/etc.)

According to TQF (Thailand Quality Framework: HE.) for General Education courses, undergraduate students should have opportunity to master learning in nature of person , think logically, good communication, realize morals and ethics, realize Thai cultural value and global cultural value. Finally students can apply knowledge in daily life for quality of life.

Section 3 - Characteristics and Operations

1. Course description

(English) Components of information technology, hardware and software, Microsoft Word, PowerPoint, Excel, data and information, database, network and telecommunication, Internet, Intranet, and Extranet.

(ไทย) องค์ประกอบของเทคโนโลยีสารสนเทศ ฮาร์ดแวร์และซอฟต์แวร์ ไมโครซอฟต์เวิร์ด พาวเวอร์พอยน์ เอ็กเซล ข้อมูลและสารสนเทศ ฐานข้อมูล เครือข่ายและโทรคมนาคม อินเทอร์เน็ต อินทราเน็ต และเอ็กซ์ทราเน็ต

2. Time length per semester (Lecture/Practice/Self-study hours)

Lecture	Practice/ Field Work/Internship	Self-Study	Remedial Class
	3 – 4 hours/week	5 hours	-

3. Time length per week for individual academic consulting and guidance

3.1 Self-consulting at the lecturer's office: Room Number 303, International College Building, Nakhon-Pathom Education Center. Mon., 9 AM – 4 PM

3.2 Consulting via office telephone/mobile phone: 081-446-4238

3.3 Consulting via e-mail: pongrapee.ka@ssru.ac.th

3.4 Consulting via Social Media (Facebook/Twitter/Line): -

3.5 Consulting via Computer Network (Internet/Webboard):

Lecturer's Moodle site: www.pongrapee.net

Section 4 - Developing Students' Learning Outcomes

Expected students' learning outcomes are categorized into five domains, as suggested in the curriculum specification (TQF2), as follows:

1. Morals and Ethics

3.1 Learning outcomes to be developed

- 1) Be aware of values and morality, ethics, generosity, integrity and honesty as well as be able to solve critical problems and disputes.
- 2) Have positive attitudes towards business and service careers.
- 3) Be able to lead and follow group members, work in team and be a role model for others.
- 4) Have self-discipline, be punctual, responsibility to self, profession and society.

3.2 Teaching Strategies

- 1) Provide examples on ethical and moral behavior in classroom such as the issue of plagiarism in doing assignments.
- 2) Provide case studies that explain ethics in business and service careers such as intellectual properties.
- 3) Be strict with classroom attendance and participation, classroom rules, students' uniform that have to be complied with the university rules and regulations.

3.3 Assessment Strategies

- 1) Class attendance, class participation, and behavior in class
- 2) On-time submission of report and assignments and their quality
- 3) Students' contribution on group assignments
- 4) Self- and peer assessment

2. Knowledge

2.1 Learning outcomes to be developed

- 1) Have up-to-date knowledge in the management and operation of businesses in the tourism industry both theories and practices widely, systematically and internationally.
- 2) Have integrated knowledge in other related disciplines.
- 3) Have knowledge and understanding in research process and techniques which will be benefit in solving problems and adding up to the knowledge in the career.

2.2 Teaching Strategies

- 1) Use problem-based learning.
- 2) Use work-integrated learning with real-world problems.
- 3) Issue information search (group and individual).
- 4) Use gamification.

2.3 Assessment Strategies

- 1) Online quizzes via Moodle
- 2) Practical and paper examinations
- 3) Online assignment submission via Moodle and Google Apps for Education
- 4) Online self- and peer assessment via Moodle Workshop

3. Cognitive Skills

3.1 Learning outcomes to be developed

- 1) Be able to analyze the causes of problems and conflicts as well as be able to solve problems systematically and find out proper solutions to the problems.
- 2) Be able to apply both theoretical and practical knowledge into real-life training and work experience appropriately in accordance with situations.
- 3) Be able to apply innovation and knowledge from other related academic fields in developing working skills.

3.2 Teaching Strategies

- 1) Use problem-based learning.
- 2) Use work-integrated learning with real-world problems.
- 3) Use case studies.

3.3 Assessment Strategies

- 1) Online quizzes via Moodle
- 2) Practical and paper examinations
- 3) Online assignment submission via Moodle and Google Apps for Education
- 4) Online self- and peer assessment via Moodle Workshop

4. Interpersonal Skills and Responsibilities

4.1 Learning outcomes to be developed

- 1) Have responsibility for individual and group assignments as well as be able to help and facilitate others in solving problems.

- 2) Be responsible for the improvement of self-academic learning and the profession continuously.

4.2 Teaching Strategies

- 1) Group assignments
- 2) Use cooperative learning techniques

4.3 Assessment Strategies

- 1) Students' contribution and behavior in group assignments
- 2) Class presentation

5. Numerical Analysis, Communication, and Information Technology Skills

5.1 Learning outcomes to be developed

- 1) Be competent in using both Thai and foreign languages in listening, speaking, reading, writing and summarizing the main points effectively.
- 2) Be able to communicate with foreigners effectively in the appropriate contexts.
- 3) Be able to use technology to communicate and present effectively.
- 4) Be able to apply statistical or mathematical knowledge in analyzing and interpreting the data.

5.2 Teaching Strategies

- 1) Provide assignments that require students to use numerical analysis skills and knowledge.
- 2) Provide assignments that require students to use information technology skills and knowledge.
- 3) Use e-learning.
- 4) Use group discussions.
- 5) Use presentation.

5.3 Assessment Strategies

- 1) Assignments
- 2) Presentation
- 3) Observe from students' use of English and/or other language in discussing with other students and lecturers as well as in presenting in front of the class.

Remark: Symbol ● means 'major responsibility'

Symbol ○ means 'minor responsibility'

No symbol means 'no responsibility'

Expected learning outcomes are combined for multiple-group instruction.

Section 5 - Lesson Plan and Assessment

1. Lesson Plan

Week	Topic/Outline	Hours	Learning Activities and Medias	Lecturer
1	<p>Course Introduction</p> <ul style="list-style-type: none"> - Assessment and evaluation agreement - Questionnaire: Fundamental IT Skills <p>Chapter 1: Fundamental Concepts of Information Technology</p> <ul style="list-style-type: none"> - Data and information - Information technology as a part of an information system - Technology assisted in data processing - Components of information technology 	3-4	<ol style="list-style-type: none"> 1. Introduce students to the course. Make an agreement on assessment and evaluation. 2. Introduce the LMS. Solve any technical problem if necessary. 3. Students complete the questionnaire asking about their fundamental IT and computing skills. The result will be used for modify teaching methods and materials to meet students' base knowledge. 4. Provide fundamental concepts of information technology using slides. Have students give some example of information technology they encounter in everyday life. 5. Use an online quiz to measure student achievements and understandings. 6. English exercises with answers – grammar and vocabulary in IT. 	Mr. Pongrapee
2	<p>Chapter 2: Computer Hardware</p> <ul style="list-style-type: none"> - Personal computers - Computers for specific use - Computer parts and peripherals 	3-4	<ol style="list-style-type: none"> 1. Provide information about recent computer hardware and trend of the IT market using slides and external websites. 2. Display major components of a personal computer with specification, performance and compatibility. 3. Have students specify hardware specification of their personal computers, or computers in the lab. 4. Use an online quiz to measure student achievements and understandings. 	Mr. Pongrapee

Session	Topic/Outline	Hours	Learning Activities and Medias	Lecturer
3	Chapter 3: Software & Services - Software types and platforms - Computer services & online services - Software licensing	3-4	1. Clarify types of software, platforms, and software licensing using slides. 2. Demonstrate Windows operating system using slides with practical approaches. Give examples of other operating systems for desktops and mobile devices. Compare their performance and specialties. 3. Introduce some useful programs, applications, and services for all platforms including equivalent (free) online services. 4. Have students share experiences in using the majority of operating systems (including mobile), programs, and application. Discuss in the availability, pricing, and capability of each application. 5. Use an online quiz to measure student achievements and understandings.	Mr. Pongrapee
4-7	Chapter 4: Office Software - Word Processing (Microsoft Word) - Spreadsheet (Microsoft Excel) - Presentation (Microsoft PowerPoint)	12-16	1. Learn how to use a word processor to create and prepare good formatting/professional-look office documents. 2. Learn the fundamental of spreadsheet formula and cross reference. Use spreadsheet to present data and solve particular problems. 3. Create a presentation or slideshow with embedded multimedia. 4. Equivalent online services for using office software over the cloud. 5. Online assignment submission	Mr. Pongrapee
8	Mid-Term Examination	3-4	Issue practical and paper examinations to verify students' knowledge and skills.	Mr. Pongrapee

Week	Topic/Outline	Hours	Learning Activities and Medias	Lecturer
9	Chapter 5: Graphics and Multimedia - Digital image - Sound & audio - Video & animation	3-4	1. Illustrate the use of graphic and multimedia contents such as digital photos, recorded voice, and videos through multimedia presentation. 2. Classify different systems and formats of multimedia files using slides. Emphasize the importance of using the appropriate multimedia format for each task through the online activity. 3. Suggest how to search, retrieve, and re-use multimedia contents from online sources while considering the licensing. 4. Introduce freeware for edit and modify multimedia contents. Have students share experiences in using multimedia software and applications. Discuss in the availability, pricing, and capability of each application. 5. Use an online quiz to measure student achievements and understandings.	Mr. Pongrapee
10-11	Chapter 6: Communication and Network - Ages of communication - Signal and transmission - Computer network	6-8	1. Describe the history of communication, wired and wireless, in each generation using slides. Remind students of any device they are familiar with. Display recent communication technology and ancient technology that remains until this date. Discuss how technology is developed from time to time. 2. Explain how the information is encoded into signal, the way it is transmitted, and the decoding. Conclude the available wired and wireless transmissions and their specific use. 3. Illustrate how to create a computer network which allows devices to communicate with each other, share resources, and connect to the world-wide internet. Classify different network devices and their use. 4. Have students determine and map their network locations, when connecting to different networks. 5. Make the awareness of information being exposed over the network and how to increase security. Use an online quiz to measure student achievements and understandings.	Mr. Pongrapee

Session	Topic/Outline	Hours	Learning Activities and Medias	Lecturer
12-13	Chapter 7: Database - Database vs office document - Database structure - Data types within the database - User interface - Data collecting form - Database administration	6-8	1. Compare systems with and without database. Identify differences between database and normal office document. 2. Describe the database structure and components using slides. 3. Specify the difference between each type of data within the database. Use in-class questioning to determine student understandings. 4. Categorize different levels of database administration and authentications. Provide examples of database usage in registration, library, ticket reservation, and hotel booking. 5. Let each student creates a simple offline database where students need to work in groups to run the database and perform data entry. 6. Introduce the use of online database via cloud services.	Mr. Pongrapee
14	Chapter 8: Data Security and Technology Ethics - Security of data and thread - Malware and antivirus - Information ethics	3-4	1. Give several known case studies to make students be aware of data security, protection of personal ID, and secure surfing. 2. Explain types of malware, destruction capabilities, and efficient methods to prevent infection and damage. 3. Explain the ethical use of IT, licensing, fair usage, creative commons, and rerated ICT laws.	Mr. Pongrapee
15	Final Examination	3-4	Issue practical and paper examinations to verify students' knowledge and skills.	Mr. Pongrapee

2. Learning Assessment Plan

Learning Outcome	Assessment Activities	Time Schedule (Week)	Proportion for Assessment (%)
<p>1. Morals and Ethics</p> <p>1) To have ethical behavior in using genuine software, applications, and contents.</p> <p>2) To respect the others' copyright and be able to employ fair usage of copyrighted contents in learning.</p>	<p>1) Assignment rubrics for submissions, both individuals and groups</p> <p>2) Classroom observation</p> <p>3) System log</p>	<p>Week 14</p>	<p>5%</p>
<p>2. Knowledge</p> <p>1) To understand the components of an information technology, their roles in related fields, and in every aspect of life.</p> <p>2) To have updated information about recent information technology that assists in works and studies.</p>	<p>1) Assessment rubrics for submissions</p> <p>2) Quiz results</p> <p>3) Questionnaire results</p>	<p>Throughout the semester</p>	<p>50%</p>
<p>3. Cognitive Skills</p> <p>To develop problem solving tools using world-wide available information technology.</p>	<p>1) Assessment rubrics for submissions</p> <p>2) Quiz results</p> <p>3) Questionnaire results</p>	<p>Week 4-7</p>	<p>10%</p>

Learning Outcome	Assessment Activities	Time Schedule (Session)	Proportion for Assessment (%)
<p>4. Interpersonal Skills and Responsibilities</p> <p>1) To examine the role of interpersonal skills and responsibility as an aspect of work ethic.</p> <p>2) To develop strategies for improving interpersonal skills and responsibility.</p>	<p>1) Assessment rubrics for assignments</p> <p>2) Classroom observation</p> <p>3) Questionnaire results</p> <p>4) System log</p>	<p>Session 12-13</p>	<p>10 %</p>
<p>5. Numerical Analysis, Communication and Information Technology Skills</p> <p>1) To integrate the use of learning management system (LMS) with the instruction process throughout the course.</p> <p>2) To apply recent information technology including cloud computing to assist in learning process.</p>	<p>1) Assessment rubrics for submissions</p> <p>2) Automatic quiz scoring</p> <p>3) System log</p>	<p>Throughout the semester</p>	<p>25 %</p>

Section 6 - Learning and Teaching Resources

1. Textbook and Main Documents

Course materials provided by the lecturer

2. Important Documents for Extra Study

Video presentations from YouTube

3. Suggested Information (Printing Materials/Website/CD/Others)

Information retrieved from search engines (e.g. Google) and YouTube videos.

Suggested keywords: Information Technology, Cloud Computing, Computer Hardware, Software, Mobile Application, Computer Network

Section 7 - Course Evaluation and Revising

1. Strategies for Course Evaluation by Students

Using a questionnaire to collect students' opinions to improve the course and enhance the curriculum. Sample questions:

- 1) The e-learning website is easy to access and login.
- 2) All instructions are clear.
- 3) With the e-learning website, students can learn faster than only using slides and sheets.
- 4) Students can follow up with the course and check the learning progress.
- 5) Students can share opinions with each other.
- 6) Students can contact the lecturer easily using the internal messaging system and forums.
- 7) Course contents and materials are appropriate in both quality and quantity.
- 8) Continuity between chapters is appropriate.
- 9) Online quizzes and assignments are easy to do.
- 10) Students can apply knowledge learned from this course with real-world problems.

..... etc.

2. Strategies for Course Evaluation by the Lecturer

The lecturer observes the class and determine if:

- 1) The lecturer is well prepared for class sessions.
 - 2) The lecturer answers questions carefully and completely.
 - 3) The lecturer uses examples to make the materials easy to understand.
 - 4) The lecturer stimulated interest in the course.
 - 5) The lecturer made the course material interesting.
 - 6) The lecturer is knowledgeable about the topics presented in this course.
 - 7) The lecturer treats students respectfully.
 - 8) The lecturer is fair in dealing with students.
 - 9) The lecturer makes students feel comfortable about asking question.
 - 10) Course assignments are interesting and stimulating.
 - 11) The lecturer’s use of technology enhanced learning in the classroom.
- etc.

3. Teaching Revision

The lecturer revises teaching and learning process based on the results from the questionnaire results.

4. Feedback for Achievement Standards

International College Administrator Committee monitor to assessment process and grading.

5. Methodology and Planning for Course Review and Improvement

- 1) Revise and develop course structure and process every three years.
- 2) Assign different lecturers teach this course to enhance students’ vision.

Curriculum Mapping Illustrating the Distribution of Program Standard Learning Outcomes to Course Level

Program: International Business

Courses	1. Morals and Ethics				2. Knowledge			3. Cognitive Skills			4. Interpersonal Skills and Responsibility		5. Numerical Analysis, Communication and Information Technology Skills			
	1	2	3	4	1	2	3	1	2	3	1	2	1	2	3	4
IGM1102 Introduction to Information Technology	○	○	○	●	○	●	○	○	○	●	●	●	○	○	●	●

Program: Tourism Management

Courses	1. Morals and Ethics				2. Knowledge			3. Cognitive Skills			4. Interpersonal Skills and Responsibility		5. Numerical Analysis, Communication and Information Technology Skills			
	1	2	3	4	1	2	3	1	2	3	1	2	1	2	3	4
IGM1102 Introduction to Information Technology	●	○	○	●	○	●	○	○	○	●	●	●	○	○	●	○