Course Outline
Faculty of Management Studies and Commerce
University of Sri Jayewardenepura

Year and Semester	Year I Semester I
Course Code:	ITC1370
Course Title:	Information Technology for Business
Core/ Elective:	Core
No of Credits	03 Credits (150 Notional Hours)
Prerequisites	None
Course Coordinator	Mr. Prabhasara Athurupane (prabhasara@sjp.ac.lk)
Panel of Lecturers	1. Mr. Shantha Puhulwella 11. Ms. Upeksha Samarasinghe 2. Dr. Shashikala Subhashini 3. Ms. Kaveesha Silva 4. Mr. Prabhasara Athurupane 5. Ms. Lakshana Assalaarachchi 6. Mr. Kavinga Elamulla 7. Ms. Dulari Perera 8. Ms. Zikra Fazil 9. Ms. Nadumi Sellahewa 10. Ms. Gangulie Ranawaka

Notional Hours	Direct Contact Hours	Other Notional Hours	Total
	Teaching, Practical, Assessment 48	Independent Learning 102	150

Aim/s of the Course	The aim of this course is to provide theoretical knowledge in information systems and practical applications of information technology in business.
Course Description	Information technology and systems are transforming the business environment, and most of us are connected to them in multiple ways. The course provides students with theoretical knowledge and practical skills relating to information technology and information systems. The theoretical module discusses the importance of information technology and information systems, elements of information systems, and applications of information systems for organizational effectiveness and efficiency. In addition, the information systems development process will be introduced during the course. The practical modules provide the knowledge and practical skills in word processing applications, spreadsheet applications, integrated application development, simple mobile and web applications development which are frequently required in modern organizational environment.

Intended Learning Outcomes of the Course (ILOs)	ILO1: Explain the concepts of information technology and information systems. ILO2: Identify the importance of information technology and systems for today's organizations. ILO3: Identify the security-related issues faced by organizations due to the use of modern information systems. ILO4: Describe the information system development and implementation process. ILO5: Apply computer-based applications and technologies in their personal and professional life.			
Course Specification/ Content (Main topics, Sub topics):	Week	Main Topic/Subtopics	Ref. for reading materials or other requirements as applicable	Ref. for ILOs	Remarks
		Theory Module (Self-study video material & In-class discussions)			
	1.	**Overview of Information Technology and Systems** • Define what an information system is, by identifying its major components. • Describe the basic history of information systems. • Explain several ways how Information Technology is integrated into our personal lives and corporate world. • Describe the use of Information Systems to competitive advantage.	Chapter 1 (Ref: 01)	ILO 01, ILO 02	
	2.	**Hardware** • Identify computer system architecture - System Diagram Input/Processing/Output/Storage and Networking hardware • Discuss trends in hardware. • Identify how data is represented in computer systems. • Prepare specifications for personal computers.	Chapter 2 (Ref: 01)	ILO 01	

	3.	**Software** • Define the term software. • Describe the two primary categories of software. • Describe the role ERP software plays in an organization. • Describe SaaS (cloud computing) and its advantages and disadvantages for use in an organization. • Define the term open source and identify its primary characteristics.	Chapter 3 (Ref: 02)	ILO 01	
	4.	**Data and Databases** • Understand the role of data in Information Systems. • Understand the concepts of database and database management systems. • Discuss concepts of Business Intelligence.	Chapter 4 (Ref: 01)	ILO 01	
	5.	**Networking and Communication** • Define a computer network and its application. • Identify the data transmission characteristics. • Outline the types of wired and wireless networking media. • Identify the networking architecture and network types. • Describe several types of networking devices with their purpose. • Identify the most common communication protocols and networking standards used with networks today. • Identify the trends in networking.	Chapter 5 (Ref: 03)	ILO 01	
	6.	**Information Systems Security** • Understand what Information Systems Security is . • Identify the information security triad. • Identify internal and external threats of information systems. • Identify strategies for securing Information Systems.	Chapter 6 (Ref: 01) (Ref: 04)	ILO 01, ILO 03	

	7.	**Business Processes (BP)** • Define the term business process. • Understand the tools of documentation of business processes. • Identify the different systems needed to support business processes in an organization. • Explain how business process management and business process reengineering work. • Understand how information technology combined with business processes can bring competitive advantage to an organization.	Chapter 8 (Ref: 01)	ILO 01	
	8.	**The People in Information Systems** • Describe different roles that people play in the design, development, and use of information systems. • Identify different career paths available to those who work with information systems. • Explain the importance of where the information systems function is placed in an organization. • Describe the different types of users of information systems.	Chapter 9 (Ref: 01)	ILO 01	
	9.	**Information Systems Development** • Explain the overall process of developing a new software application. • Explain the differences among software development methodologies. • Identify different types of information system implementation methodologies	Chapter 10 (Ref: 01)	ILO 01, ILO 04	
	Session	**Practical Module 1 (Computer Lab Sessions)**			
	1.	**Introduction to spreadsheets** • Basic Formatting • Conditional Formatting • Cell Referencing	Online Resources	ILO 05	

	2.	**Application of MS Excel Functions for business use**	Online Resources	ILO 05
	3.			
	4.	• Basic Functions		
	5.	**Application of logical, lookup and reference functions in data processing**	Online Resources	ILO 05
	6.			
	7.	• Advanced functions and applications		
	8.	**Perform data analysis and summarization 1**	Online Resources	ILO 05
	9.	• Tools for large data sets - Sort, Filter		
	10.	**Introduction to financial data analysis** • Financial functions	Online Resources	ILO 05
	11.	**Use data validation in MS Excel**	Online Resources	ILO 05
	12.	**Perform data analysis and summarization 2**	Online Resources	ILO 05
	13.	• Pivot table • Pivot charts		
	14.	**Introduction to what-if analysis** • Goal Seek	Online Resources	ILO 05
	15.	• Scenario Manager • Data Tables		
	16.	• Solver		
	17.	**Macro and Visual Basic for Application (VBA) – Part 1** • Introduction to VBA • Introduction to basic programming concepts	Online Resources	ILO 05
	18.	**Macro and Visual Basic for Application (VBA) – Part 2**	Online Resources	ILO 05
	19.	• Applications of VBA in MS Excel		
	20.	• Use of generative AI for effective VBA application development		
	21.	**Applications for converting a manual business process into an automated process** • Introduction to PowerApps • PowerApps related Technologies • Different ways to build a mobile app in PowerApps	Online Resources	ILO 05
	22.	**Design and develop a website using CMS** • Introduction to WordPress	Online Resources	ILO 05

	23.	**Design and develop a website**	Online Resources	ILO 05	
	24.	• Customize a WordPress site using themes			
		Practical Module 2 (Self-study)			
	Self-Paced	**Word processing using MS Word** Use of MS-Word as an effective documentation tool.	Course Manual and Online Resources	ILO 05	
		Advanced tools in word processing Working with large documents	Course Manual and Online Resources	ILO 05	
		Merging and mailing Usage of Mail merge	Course Manual and Online Resources	ILO 05	
		Cloud apps for collaboration computing Introduction to collaborative word processing systems	Online Resources	ILO 05	

Teaching-Learning Methods	• Blended (In person, assisted by LMS and other online resources) • Computer practicum • Quizzes • Interactive discussions

Assessment Methods /Details	Method	Details	Marks as a %
	Continuous Assessments	Theoretical and practical knowledge of the students will be continuously evaluated. **1. In class LMS based quizzes – [10 Marks x 3 Quizzes] = 30 Marks** Duration of a quiz – 15 Minutes Maximum no. of questions per quiz – 10 Each quiz comprises of the following. • Questions covering **theory module**. • Questions covering **practical module 1**. • Short-essay type questions (where the students need to type in the answers) covering **theory module**. Quizzes are planned to be conducted during the 2nd session of the 3rd, 7th, and 12th week of the semester.	40

		2. **In class LMS based quiz for MS Word – 10 Marks** Duration of the quiz – 30 Minutes The quiz comprises of questions from **practical module 2.** Quiz is planned to be conducted during the 15th week of the semester.	
	Final Examination	Theoretical and practical knowledge of the students will be evaluated in the final examination. **Mode of the examination –** LMS based online exam. The structure of the final examination. 1. Theory component • Multiple choice questions (MCQ) and Short-essay type questions (where the students need to type in the answers) covering the **theory module**. 2. Practical component • Questions covering **practical module 1**.	60
	Total		100
Recommended Readings	• Courseware on LMS (https://lms.mgt.sjp.ac.lk) • Information Systems for Business and Beyond (2019), David Bourgeois, Saylor Foundation (Ref: 01) • Business Information Systems - Technology, Development and Management for the E-Business (2015), Paul Bocij, Andrew Greasley and Simon Hickie (Ref: 02) • Understanding Computers Today and Tomorrow, Comprehensive (2015) (15th ed.), Deborah Morley, Charles S. Parker (Ref: 03) • Fundamentals of information systems security (2018) (3rd ed.), Kim, D., & Solomon, M. (Ref: 04)		
Additional Readings	• https://support.microsoft.com/en-us/word • https://support.microsoft.com/en-us/excel		
Course Policies	**Attendance** Students are expected to attend lectures every week. It is the responsibility of any student who is absent to refer and catch-up any missed sessions before participating the next lecture session. The acceptable ratio of attendance for this course, is the default for 1st year courses of the Faculty, i.e. **80%.** If you are absent from lectures due to any extenuating circumstances such as illnesses, any requests supported by documents such as medical certificates should be directly handed over to your course lecturer before the last week of lectures. Students whose attendance is less than 80% and have not submitted any appeals as mentioned above are at the risk of not receiving admissions to sit for the final examination.		

Class Participation

Proper self-conduct of students is always expected to ensure the smooth functioning of classroom activities. Therefore, you are advised to avoid behaving in a disruptive manner when lectures and tutorial classes are conducted. Disruptive behavior includes interruption caused by cell phones and other electronic devices, chattering, sleeping, and disengagement.

Late Submission of Assignments/works

All assignments should be submitted on or before the due date stipulated. Assignments received after the due date will be penalized. Assignments more than a week late will NOT be accepted without prior approval for emergency situation.

Academic Integrity and Ethical Conduct

Students are expected to maintain to high standards in honesty and ethics in all course related academic activities. Activities which are considered unethical include but not limited to signing for others in attendance, copying / plagiarizing using others assignments or the Internet. Violators will be dealt with using existing Faculty and University rules and regulations with regard to such acts of academic misconduct.

Students with Special Needs

Students are identified as the students with special needs by using the information provided by student counsellors and the University healthcare centre. If needed, please make sure to meet the student counsellor assigned and the officials in the University healthcare centre for necessary steps. Depending on the information provided by them, certain adjustments to the normal procedures may be made for the benefit of them.

Continuous assessments and end semester examination

Since this course's evaluation methods are completely computer based, it could face unforeseen circumstances (such as natural disasters, technical failures due to resource constraints of the university etc.) hence leading to evaluations been postponed or cancelled. Therefore, the scheduled dates of the continuous assessments could be subject to change. The dates can be pushed back, and/or the mode of evaluation could be changed given the gravity of the circumstances.