Study plan No.	**2020-2021**		**University Specialization**		**Management information systems**
Course No.	**0506212**		**Course name**		**Systems Analysis and Design**
Credit Hours	**3**		**Prerequisite Co-requisite**		**0506111**
Course type	☐ MANDATORY UNIVERSITY REQUIREMENT	☐ UNIVERSITY ELECTIVE REQUIREMENTS	☐ FACULTY MANDATORY REQUIREMENT	☐ Support course family requirements	☐ Mandatory requirements / ☐ Elective requirements
Teaching style	☐ **Full online learning**		✓ **Blended learning**		☐ **Traditional learning**
Teaching model	☐ **2Synchronous: 1asynchronous**		✓ **2 face to face : 1synchronous**		☐ **3 Traditional**

Faculty member and study divisions information (to be filled in each semester by the subject instructor)

Name	Academic rank	Office No.	Phone No.	E-mail	
Division number	**Time**	**Place**	**Number of students**	**Teaching style**	**Approved model**
				2:1	**Blended**

Brief description

This course covers in detail the information systems development process from the management perspective. The IS application development process (the systems life cycle) will be covered in detail starting from the planning phase to the implementation phase. The course is intended to help students understand the most popular methodology of information systems development (SDLC) and how to use both technological and business skills to IS planning, analysis, design, development and implementation.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc.)	Valacich, George and Hoffer (2019) 'Essentials of Systems Analysis and Design', 9th edition, Pearson publishing. ISBN:978-0135172759			
Supportive learning resources (Books, databases, periodicals, software, applications, others)	1 Vision 2 Smart draw 3 Microsoft project management			
Supporting websites				
The physical environment for teaching	☐ Class room	✓ labs	☐ Virtual educational platform	☐ Others
Necessary equipment and software				
Supporting people with special needs				
For technical support				

Course learning outcomes (S *= Skills, C= Competences K= Knowledge,)*

No.	Course learning outcomes	The associated program learning output code
	Knowledge	
K1	Demonstrate an understanding of systems analysis and design principles and concepts.	**MK1**
K2	Help students understand the systems development life cycle techniques (SDLC) and steps used in developing an information system.	**MK1**
K3	Explain the alternative sources for applying or developing a new information system.	**MK2**
K4	Teaching the modern and traditional methodologies used to develop IS.	**MK2**
K5	knowing the contemporary approaches of designing information system	**MK3**
	Skills	
S1	Managing the IS project through studying the alternatives for the system itself, conducting feasibility studies, and being able to create Gantt charts and network diagrams using Microsoft Project.	**MS2**
S2	Determine system requirements through eliciting user information and system performance expectations.	**MS1**
S3	Structure these requirements and produce the requisite systems documentation at each point of the systems development life cycle.	**MS2**
S4	Using VISIO to conduct process modeling and data modeling**.**	**MS1**
S5	Converting ER diagrams into tables.	**MS1**
	Competences	
C1	Help students Understand the process of system's final installation and implementation.	**MC2**
C2	Being able to differentiate between the guidelines of designing forms and the Guidelines of designing reports.	**MC2**
C3	Learning how to design the process of interaction between the user and the System itself.	**MC1**

Mechanisms for direct evaluation of learning outcomes

Type of assessment / learning style	Fully electronic learning	Blended learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
First exam		**30%**		
Second / midterm exam		**0**		
Participation / practical applications		**––**		
Asynchronous interactive activities		**30%**		
final exam		**40%**		

Note: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Schedule of simultaneous / face-to-face encounters and their topics

Week	Subject	learning style*	Reference **
1	The Systems development environment	**lecture**	30
2	**Systems life cycle SDLC**	**lecture**	54
3	Data modeling: ER diagrams	**lecture**	70
4	Building relations from the ER diagrams	**lecture**	70
5	Practical session on Visio	**lecture**	-----
6	Applying normalization	**lecture**	110
7	Designing forms & reports	**lecture**	110
8	Designing user interfaces	**lecture**	150
9	Designing dialogues	**lecture**	150
10	Implementing the system	**lecture**	180
16	**Final Exam**		

*** Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.**
**** Reference: Pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.**

Schedule of asynchronous interactive activities (in the case of e-learning and blended learning)

Week	Task / activity	Reference	Expected results
1	Practical session on Microsoft projec	-----	
2	Systems planning and selection	110	
3	Systems planning and selection	110	
4	Determining system requirements	150	
5	Determining system requirements	150	
6	Structuring system requirements	180	
7	Process modeling 1	180	
8	Process modeling 2	180	
9	Exercises on process modeling using Data flow diagrams (DFDs) 1	----	
10	Cases on process modeling	180	
11	Cases on data modeling	180	
12	Cases on normalization	110-140	
13	Exercises on designing UI	----	
14	Exercises on designing forms & reports	----	