International Information Technology University JSC
Faculty of Information Technology
Department of Mathematical and Computer Modeling

SYLLABUS
(ACADEMIC PROGRAM)

Course (code, title): IBP 4308 Integration of the Business Processes SAP
(code, title):

Major (code, title): 5B070500 Mathematical and computer modeling
(code, title):

Year: 4   **Semester:** 1   **Number of credits:** 4 ECTS

Lectures: 15 hours

Laboratory classes: 30 hours

T/SIS: 75 hours

Total: 120 hours

Final assessment form: Examination

Almaty 2020

Academic program of the course (code, title) IBP 4308 Integration of the Business Processes SAP has been reviewed at the meeting of Mathematical and Computer Modeling department.

Minutes №.1 dated «17»August 2020

Head of the Department   _____   Ydyrys A.Zh., assistant-professor, PhD
                                            signature   full name, title, degree

Author   _____   Karashbayeva Zh.O., senior-lecturer, MSc
                                            signature   full name, title, degree

The working academic program was approved at the meeting of the Educational and Methodological Board of JSC "IITU"

Minutes № 1 dated "28"August 2020 .

Director of the Department   _____   A.Mustafina
for Academic Affairs   Signature

1. GENERAL INFORMATION

Faculty	Information Technology
Major code and title	5B070500 Mathematical and Computer Modeling
Educational program code and title	
Year, semester	4th course, 7th semester
Subject category	Professional, elective
Number of credits (ECTS)	4 ECTS
Prerequisites	Introduction to SAP
Postrequisites	Project Management, Business Processes
Lecturer	Karashbayeva Zh.O., Senior Lecturer, MSc, office # 807 zh.karashbayeva@iitu.kz, Monday 12:00-14:00

2. GOALS, OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE

Course goals
To familiarize students with the important branches of ERP system and its applications. To develop their knowledge and skills in SAP ERP systems in a way which encourages confidence and provides satisfaction and enjoyment. To develop an understanding of main principles and an appreciation of SAP. During the educational process students should become familiar with and able to apply methods and tools to solve a variety of problems.

Course objectives
- Comprehend the technical aspects of ERP systems
- Learn concepts of reengineering and how they relate to ERP system implementations
- Be able to map business processes using process mapping techniques in SAP
- Understand the steps and activities in the SAP life cycle
- Be able to identify and describe typical functionality in an ERP system
- Obtain practical hands-on experience with SAP transaction flow and configuration of SD, FI, CO, PP, HR, and MM. This should be highlighted on your resume.

Learning outcomes of the course
Students successfully completing the course will be able to:
- open the new ways for student's career building.
- pass SAP certification
- gain competitive advantage in tense situations.
- increase and improve their credibility as a professional or business personnel.
- validate their efficiency and proficiency regarding work.

3. Course description

An Enterprise Resource Planning (ERP) system is software that runs all business areas of an organization including accounting and finance, HR, sales and distribution, production, purchasing and inventory. It is cross-functional, process-centered, real time, and based on industry best practices, from service to manufacturing to not-for-profit. It is important that business and systems engineers obtain working knowledge of these systems as in their careers they will be ERP users, auditors, consultants, and/or developers.
This course covers ERP theory and practice. Course content includes evolution of ERP systems, business process reengineering, process mapping, the ERP life cycle, ERP functionality, ERP boltons and auditing and risk issues. There is also a significant technology component to this class. As NCSU is a member of the SAP University Alliance, you, as a student, have the opportunity to receive training on SAP, the market leader in ERP software. Knowledge you obtain in this class will give you a competitive advantage

in the marketplace as SAP is used by thousands of companies worldwide and hands-on training is highly sought after by recruiters. As well, this is the only ERP centric class in the state and students that take two classes with a significant SAP component receive an SAP certificate.

4. COURSE POLICY

Students are forbidden to:
- submit any tasks after the deadline. The mark for late submissions is decreased;
- cheat. Plagiarized papers shall not be graded;
- be late for classes. Three times' tardy amounts to one absence;
- retake any tests, unless there is a valid reason for missing them;
- use mobile phones in class.

Students should always
- be appropriately dressed (formal/semi- formal styles are acceptable);
- show consideration for and mutual support of teachers and other students;
- let the teacher know of any problems arising in connection with their studies.

Syllabus change
Instructors reserve the right to change or modify this syllabus as needed; any changes will be announced in class.
Online classes will be on platforms MS Teams, DL and Zoom.

5. LITERATURE

Basic literature:
1. Bradford, M. (2016). Modern ERP Systems: Select, Implement and Use Today's Advanced Business Systems. 2nd Edition. ISBN-13: 978-0557434077.
2. http://scn.sap.com/community/uac (SAP Univeristy Alliances)

Supplementary literature:
3. http://www.acc-sap.ru (АЦК)

6. Course schedule

Week/ date	Course topics	References	Lectures (1 h/w)	Lab. sessions (2 h/w)	TSIS (1 h/w)	SIS (4 h/w)
1	Introduction to ERP Systems	[1, 1-2]	1	2	1	4
2	Overview SAP products	[1, 1-2]	1	2	1	4
3	SAP Structures	[1, 1-2]	1	2	1	4
4	Business Processes	[1, 1-2]	1	2	1	4
5	SAP MM Module	[1, 1-2]	1	2	1	4
6	SAP SD Module	[1, 1-2]	1	2	1	4
7	SAP MM and SD Modules	[1, 1-2]	1	2	1	4
8	SAP VM Module	[1, 1-2]	1	2	1	4
9	SAP PP Module	[1, 1-2]	1	2	1	4
10	SAP VM and PP Modules	[1, 1-2]	1	2	1	4
11	SAP CO Module	[1, 1-2]	1	2	1	4

12	SAP FI Module	[1, 1-2]	1	2	1	4
13	SAP FI and CO Modules	[1, 1-2]	1	2	1	4
14	SAP Configurations	[1, 1-2]	1	2	1	4
15	Customizing Tools. Review	[1, 1-2]	1	2	1	4
	Total hours:	**120**	**15**	**30**	**15**	**60**

7. List of topics/ assignments for laboratory classes

№	Topic Title	Number of hours	References	Form of reporting	Deadline
1	2	3	4	5	6
1	Introduction to ERP Systems	2	[1, 1-2]	Submission	At the end of the week
2	Overview SAP products	2	[1, 1-2]	Submission	At the end of the week
3	SAP Structures	2	[1, 1-2]	Submission	At the end of the week
4	Business Processes	2	[1, 1-2]	Submission	At the end of the week
5	SAP MM Module	2	[1, 1-2]	Submission	At the end of the week
6	SAP SD Module	2	[1, 1-2]	Submission	At the end of the week
7	SAP MM and SD Modules	2	[1, 1-2]	Submission	At the end of the week
8	SAP VM Module	2	[1, 1-2]	Submission	At the end of the week
9	SAP PP Module	2	[1, 1-2]	Submission	At the end of the week
10	SAP VM and PP Modules	2	[1, 1-2]	Submission	At the end of the week
11	SAP CO Module	2	[1, 1-2]	Submission	At the end of the week

12	SAP FI Module	2	[1, 1-2]	Submission	At the end of the week
13	SAP FI and CO Modules	2	[1, 1-2]	Submission	At the end of the week
14	SAP Configurations	2	[1, 1-2]	Submission	At the end of the week
15	Customizing Tools. Review	2	[1, 1-2]	Submission	At the end of the week

8. List of topics/assignments for Student Independent Study

Proper organization of students independent study is the key to the formation of skills in mastering, learning, assimilation and systematization of acquired knowledge, ensuring a high level of academic performance in the learning process

№	Topic Title	Number of hours	References	Form of reporting	Deadline
1	2	3	4	5	6
1	Case Study of Lab #1. SAP MM Module	2	[1, 1-2]	Submission	Week #3, Friday 18-00
2	Case Study of Lab #2. SAP SD Module	2	[1, 1-2]	Submission	Week #5, Friday 18-00
3	Case Study of Lab #3. SAP MM/SD Module	2	[1, 1-2]	Submission	Week #6, Friday 18-00
4	Case Study of Lab #4. SAP VM Module	2	[1, 1-2]	Submission	Week #8, Friday 18-00
5	Case Study of Lab #5. SAP PP Module	2	[1, 1-2]	Submission	Week #10, Friday 18-00
6	Case Study of Lab #6. SAP CO Module	2	[1, 1-2]	Submission	Week #13, Friday 18-00
7	Case Study of Lab #6. SAP FI Module	2	[1, 1-2]	Submission	Week #15, Friday 18-00

9. System for evaluating student performance in a discipline:

Option 1

Period	Assignments	Score	Total

1st attestation	**Laboratory works:**	**30**	**100**
	Lab work 1	10	
	Lab work 2	10	
	Lab work 3	10	
	Quiz	**20**	
	Mid-term	**50**	
2nd attestation	**Laboratory works:**	**40**	**100**
	Lab work 4	10	
	Lab work 5	10	
	Lab work 6	10	
	Lab work 7	10	
	Quiz	**20**	
	Mid-term	**40**	
Exam			**100**
Total	**0,3*1stAtt+0,3*2ndAtt+0,4*Final**		**100**

*If the number of absences exceeds 20%, student will be automatically scheduled for a Retake (summer semester)

10. Assessment criteria:

The point-rating letter system for assessing the educational achievements of students with their interpretation in the traditional grading scale:

Letter Grade	Numerical equivalent	Points (%)	Traditional system assessment	General description of grading criteria
A	4,0	95-100	Excellent	The student has knowledge of the subject in the full scope of the curriculum, understands the discipline deeply enough; shows a high level of knowledge that exceeds the volume provided by the syllabus, gives an exhaustive answer
A-	3,67	90-94		The student has knowledge of the subject in the full scope of the curriculum, understands the discipline deeply enough; gives an exhaustive answer
B+	3,33	85-89	Good	The student shows a complete, well-founded knowledge of the subject, but the answers did not always highlight the main idea, rational methods of calculation were not always used; the answers were mostly brief and sometimes
B	3,0	80-84		
B-	2,67	75-79		
C+	2,33	70-74		

				unclear.
C	2,0	65-69	Satisfactory	The student demonstrates sufficient knowledge of the subject, but without proper depth and justification, the answers are unclear and without proper logical sequence.
C-	1,67	60-64		
D+	1,33	55-59		
D	1,0	50-54		
FX	0,5	25-49	Unsatisfactory	The student demonstrates insufficient knowledge of the subject, positive answers were not given to individual questions.
F	0	0-24		The student demonstrates a very low level of knowledge of the subject.

11. Assessment and evaluation materials (exam questions):

List of exam questions on lecture topics:
1. *Introduction to ERP Systems*
2. *Overview SAP products*
3. *SAP Structures*
4. *Business Processes*
5. *SAP MM Module*
6. *SAP SD Module*
7. *SAP MM and SD Modules*
8. *SAP VM Module*
9. *SAP PP Module*
10. *SAP VM and PP Modules*
11. *SAP CO Module*
12. *SAP FI Module*
13. *SAP FI and CO Modules*
14. *SAP Configurations*
15. *Customizing Tools. Review*

1	Case Study. MM Module: Laboratory work 1- 10% and 5% (quiz)	15%
2	Case Study. SD Module: Laboratory work 2- 10% and 5% (quiz)	15%
3	Case Study. MM/SD Module: Laboratory work 3- 10% and 10% (quiz)	20%
4	Midterm (Case Study + test). Tasks from #1 to #6th week lectures	50%
	Total:	100%
5	Case Study. VM Module: Laboratory work 4- 10% and 5% (quiz)	15%
6	Case Study. PP Module: Laboratory work 5- 10% and 5% (quiz)	15%
7	Case Study. CO Module: Laboratory work 6- 10% and 5% (quiz)	15%
8	Case Study. FI Module: Laboratory work 7- 10% and 5% (quiz)	15%
9	End of term (Case Study+ test). Tasks from #7 to #15th week lectures	40%
	Total:	100%
10	Final exam (Test):	
	SAP/MM module	30%
	SAP/FICO module	20%
	SAP/CO module problem	15%
	SAP/PP module	15%
	SAP/SD module	20%
	Total:	100%