Course Name	Concept of Programming Language						
Course Number	278 CSM -3						
Credit Hours	3						
Contact Hours	4						
Course Coordinator	Dr.Talal Saeed Saleh						

Text Books	Concepts of Programming Languages" 8th and 9th Edition, Robert W. Sebesta, Publisher: Addison-Wesely,										
Other Supplemental Materials											
Specific Course Information											
a. Course Description	This course focuses the object-oriented perspective on programming and contains comprehensive facilities for procedural and functional programming. The fundamental concepts of programming languages are described by defining the design issues of the various languages constructions, examining the design choices for these constructions in some of the most common languages, and critically comparing the design alternatives.										
b. Pre-requisite	114CSM-4 Object-Oriented Programming (OOP)										
c. Required/ Elective/ Selected Elective	Required										
	Specific Goals for the Course										
a. Course Learning Outcomes	 Define mathematical concepts, algorithmic principles, and computer science fundamentals An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution An understanding of professional, ethical, legal, security and social issues and responsibilities Recognition of the need for and an ability to engage in lifelong learning An ability to communicate effectively in written with range of audiences 										

Mapping		a1	a2	b1	b2	b3	b4	c1	c2	c3	c4	d1	d 2		
of STUDENT	1	\checkmark													
LEARNING	2			<u> </u>					İ	İ					
with COURSE	3		<u> </u>									<u> </u>			
LEARNING	4	1							<u> </u>						
OUTCOMES(CLOS)	5														
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Topics Covered	languages Programming Domains Language Evaluation Criteria														
	Influences	or	i L	angu	age	Des	sign	(Co	omputer Architecture,						
	Programm	ing	Meth	nodol	ogies	s), L	Langu	lage	Cate	egori	es, I	Lang	uage		
	design Tra	ide-C	Offs,	Imple	emen	tatio	n Me	ethod	s(La	yerec	l Inte	erface	es of		
	Virtual C	Comp	uter,	Co	mpila	ation	Pro	ocess	, Pι	ire	Inter	preta	tion,		
	Hybrid Im	iplen	nenta	tion	Syste	ems),	Intro	oduci	tion (of Ol	oject	Orie	nted		
	Programming.														
	Describing Syntax and Semantics: Introduction of Syntax and														
	Semantics, The General Problems of Describing Syntax (Language														
	Recognizers, Language Generator), Formal Methods of Describing														
	Syntax (Backus-Naur Form and Context Free Grammars), Attribute														
	of Grammars(Static Semantics, Attribute Grammars Defined,														
	Intrinsic Attributes, Examples of Attribute Grammars, C								s, Co	ompi	iting				
	Attribute Programs:	Var	ues, amic	Eva Sem	antic	on),	Des	cribi	ng	the	Mea	Aeaning of			
	i iograins.	Dyn	anne	bein	anne	5.									
	Data Types: Introduction of Data Types. Primitive Data Types.														
	Character String Types, User-Defined Ordinal Types, Types of														
	Arrays, A	ssoc	iative	e Ar	rays,	Rec	cord	Тур	es, 1	Unio	n Ty	vpes,	Set		
	Types, Pointer Types														
	Support of Object Oriented Programming Concerts Design														
	Support of Object Oriented Languages Support for Object Oriented														
	Programming in C++, Support for Object Oriented Programming in														
	Java, The Object Oriented Model of java Script														
	Exception Handling : Introduction to Exception Handling.														
	Exception handling in PL/I, Exception Handling in C++, Exception														
	Handling i	n Jav	va.			1			2			-			