



COURSE SPECIFICATIONS (CS)

Course Specifications

Institution:Najran University	Date: 15-9-2017
College/Department : College Of Computer Science and Information system	

A. Course Identification and General Information

1. Course title and code: Programming Language 1 , 111 CSS-4			
2. Credit hours:4hrs			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) B.Sc. in Computer Science			
4. Name of faculty member responsible for the course Somaya Alhazmi			
5. Level/year at which this course is offered: 3			
6. Pre-requisites for this course (if any): NIL			
7. Co-requisites for this course (if any): N/A			
8. Location if not on main campus: College of Computer Science & Information system(Female campus)			
9. Mode of Instruction (mark all that apply):			
a. traditional classroom	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
b. blended (traditional and online)	<input checked="" type="checkbox"/>	What percentage?	100
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
Comments:			

B Objectives

1. What is the main purpose for this course?

Study of basic and intermediate concepts of Structured Programming using C. The topics included are Flowcharts, Algorithm, Data types, Identifiers, Storage classes, Constants, Operators, Expressions, Statements, Selection statements, Switch, Iteration statements, Jump statements, Function calls, Arrays, Pointers, Structures, Unions, Enumerations.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

#All the reference books, text books and other learning materials such as Internet resources are posted in the Blackboard.

#Online links should be given so that the students can use the web based materials to incur more knowledge about the course.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Introduction to Programming language and its types, Introduction to assembler, interpreter and compiler	1	5
Algorithms and Flowcharts	1	5
Constants, Identifiers, Variables and Data types	1	6
Operators, Expressions and Console I/O Statements	1	6
Selection statements, Iteration statements, Continue and break statements	2	12
Arrays	1	6
Function	2	12
Strings	1	6
Pointers	2	12

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	45	6		30		81
	Actual	45	6		30		81
Credit	Planned	3	0		1		4
	Actual						

3. Additional private study/learning hours expected for students per week.

NA

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	CLO_1 Describe the basic concepts of C programming	TS:1-Interactive Lectures using PowerPoint slides with more examples in the class TS:2- Engaging the students in problem based learning through Tutorials TS:3- Lab Demonstrations TS: 4 – Recall the topics discussed in the last lecture by asking questions to the students.	#Locally Developed Exams such as Quiz, Mid & Final Exams with scoring rubrics #Assignments involving critical and logical thinking questions #Quizzes

		<p>TS: 5 – Associating the topics in each chapter with the CLO.</p> <p>TS: 6 – Providing online links (internet resources) in the slides at the end of each chapter to the students to know more about the topics discussed in the lecture</p> <p>TS:7 – Conducting oral quizzes by dividing the students into groups and asking them the questions at the end of the lecture involving complex topics</p> <p>TS:8 – Giving more example programs in the lecture and asking the students to write a program at the end of lecture</p> <p>TS: 9 – Discussion with the students in the class hours.</p>	
1.2			
2.0	Cognitive Skills		
2.1	CLO_2: Construct C programs with basic programming elements	<p>TS:1-Interactive Lectures using PowerPoint slides with more examples</p> <p>TS:2- Engaging the students in problem based learning through Tutorials</p> <p>TS:3- Lab Demonstrations</p> <p>TS: 4 – Recall the</p>	MID 1

		<p>topics discussed in the last lecture by asking questions to the students (internet resources) in the slides at the end of each chapter to the students to know more about the topics discussed in the lecture</p> <p>TS: 5 – Associating the topics in each chapter with the CLO.</p> <p>TS:6 – Conducting oral quizzes by dividing the students into groups and asking them the questions at the end of the lecture involving complex topics</p> <p>TS:7 – Giving more example programs in the lecture and asking the students to write a program at the end of lecture</p> <p>TS: 8 – Discussion with the students in the class hours.</p>	
2.2	CLO_3: Apply the concept of flowchart and algorithm in solving problems	<p>TS:1-Interactive Lectures using PowerPoint slides with more examples</p> <p>TS:2- Engaging the students in problem based learning through Tutorials</p> <p>TS: 3 – Discussion with the students in</p>	MID 1, Quiz

		the class hours	
3.0	Interpersonal Skills & Responsibility		
3.1	CLO_2 : Construct C programs with basic programming elements	TS:1- Engaging the students in problem based learning through Tutorials TS: 2 – Recall the topics discussed in the last lecture by asking questions to the students TS:3 – Conducting oral quizzes by dividing the students into groups and asking them the questions at the end of the lecture involving complex topics TS:4 – Giving more example programs in the lecture and asking the students to write a program at the end of lecture	MID 2 , Final
3.2	CLO_5 : Create 'C' programs with advanced programming elements.	Same as 3.1	
4.0	Communication, Information Technology, Numerical		
4.1	CLO_2 : Construct C programs with basic programming elements	TS:1- Engaging the students in problem based learning through Tutorials TS: 2 – Recall the topics discussed in the last lecture by asking questions to the students TS:3 – Conducting oral quizzes by dividing the students into groups and asking them the	Mid-2, Final Lab ,Theory

		questions at the end of the lecture involving complex topics TS:4 – Giving more example programs in the lecture and asking the students to write a program at the end of lecture TS: 5 – Discussion with the students in the class hours	
4.2	CLO_5 : Create 'C' programs with advanced programming elements	Same as 4.1	Final LAB, theory
5.0	Psychomotor		
5.1	NA		
5.2	NA		

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quiz 1	4 week	5%
2	Quiz 2	8 week	5%
3	Assignment 1	10 week	10%
4	MID 1	7 week	15%
5	MID 2	11 week	15%
6	Final Lab	14 week	10%
7	Final Examination	15 week	40%
8	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

10 weekly office hours + appointments
4 weekly academic advising hours

E Learning Resources

1. List Required Textbooks

Brian W. Kernighan, Dennis M. Ritchie. The C Programming Language, Prentice hall, Second Edition, 2014..

2. List Essential References Materials (Journals, Reports, etc.)

NIL

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

<http://www.programiz.com/c-programming>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

Installation CD of DOS Box – C

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ol style="list-style-type: none"> Well-equipped lecture room containing board and data show device. Well-equipped laboratory for practical work.
<p>2. Technology resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> Lecture room should contain a PC attached to the data show device with MS Office and Adobe Acrobat Reader packages being installed. projectors
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>#UPS (Uninterrupted Power Supply) may be provided in the lab to overcome power failures especially during exams.</p> <p>#Upgraded Anti-Virus with long term validity may be installed in all the systems in the lab.</p> <p>#Printers should be installed in each lab to enable the students to take print out of their lab work.</p>

G Course Evaluation and Improvement Processes

<p>1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <p>At the end of the semester, the university always conducts an online faculty evaluation survey for all courses registered in the semester.</p>
<p>2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <p>Consulting peers on teaching.</p> <p>Discussion about the course in department</p>
<p>3. Processes for Improvement of Teaching</p> <p>Follow the recommendations provided by the curriculum committee at the end of the previous semester about the course.</p> <p>Encouraging the students to participate in active learning by offering tutorials and assignments.</p> <p>Relate the course topics with the Course Learning Outcomes in each chapter.</p>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> Every exam papers are reviewed by the course coordinator. Samples of students' assignments and exams are collected every semester and reviewed from time to time as per NCAAA and ABET standards.


5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- 1-Preparing course report and action plans every semester.
- 2-Planning to update course syllabus every two years (the course coordinator are reviewing the courses and the references).
- 3-Curriculum committee updates the syllabus based on the student outcomes

Name of Course Instructor: Somaya Alhazmi

Signature: Somaya Alhazmi Date Specification Completed: 15-9-2017

Program Coordinator: **Dr. Abdulrahman Thaqfan**

Signature:  _ Date Received: _____