MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

COURSE PLAN

Department	:	Computer Science and Engineering
Course Name & code	:	Compiler Design Lab & CSE 3211
Semester & branch	:	VI & CSE
Name of the faculty	:	Mr. Shyam Karanth, Ms. Priya Kamath, Ms. Deepthi S, Ms. Ancilla Juilet Pinto
No of contact hours/week:		03

ASSESSMENT PLAN:

1. In Semester Assessments	60%
Weekly evaluation of 10M each (6M for execution and 4M for observation) which is later scaled down to 30M and Three Assessment evaluation of 10M each.	
2. End Semester Examination	40%
• Written examination of 3 hours duration (Max. Marks: 40)	

Course Outcomes (COs)

At the end of this course, the student should be able to:

		No. of Contact Hours	Program Outcomes (POs) addressed
CO1:	Ability to create preliminary scanning applications and to classify different lexems.	6	PO2,PO5,PO10
CO2:	Ability to create a lexical analyzer without using any lexical generation tools.	6	PO4,PO5,PO10
CO3:	Ability to select a suitable data structure to implement symbol table.	6	PO4,PO5,PO10
CO4:	Ability to implement a recursive descent parser for a given grammar without using any parser generation tools	3	PO4,PO5,PO10
CO5:	Ability to implement a recursive decent parser for a given grammar of C programming language without using any parser generation tools.	12	PO4,PO5,PO10

CO6:	Ability to design a code generator and use LEX.	3	PO3,PO5,PO10

Course Plan

L. No.	Topics	Course Outcome Addressed
L0	Click or tap here to enter text.	CO
L1	Basic File Handling Operations	CO1
L2	Preliminary Scanning Applications	CO1
L3	Lexical Analyzer to generate tokens for operators, Keywords and special symbols	CO1,CO2
L4	Lexical Analyzer to generate tokens for Identifiers using symbol table	CO2,CO3
L5	Lexical Analyzer to generate tokens for Looping statements	CO2,CO3
L6	Recursive Decent parser for simple grammars	CO4
L7	RD Parser for declaration statements	CO3,CO5
L8	RD Parser for Array declaration and expression statements	CO3,CO5
L9	RD Parser for Decision making statements	CO3,CO5
L 10	RD Parser for Looping statements	CO3,CO5
L11	Code generation	CO6
L12	Lex Programs	CO6
L 13	Lab end semester examination for first batch	CO1-CO6
L 14	Lab end semester examination for second batch	CO1-CO6

References:

1. Alfred V. Aho, Monica S. Lam, Ravi Sethi, Jeffrey D. Ullman, “Compilers Principles, Techniques and Tools”, Pearson Education, 2nd edition. 2010.
2. Kenneth C. Louden, “Compiler Construction - Principles and Practice”, Thomson, India Edition, 2007.
3. D M Dhamdhere, “Systems Programming and Operating Systems”, Tata McGraw Hill, 2nd Revised Edition, 2001.
4. “Keywords and Identifiers”, https://www.programiz.com/c-programming/c-keywords-identifier
5. Behrouz A. Forouzan, Richard F. Gilberg “ A Structured Programming Approach using C”, 3rd edition, Cengage Learning India Private Limited, India, 2007.
6. Click or tap here to enter text.

7. Click or tap here to enter text.

Submitted by: Mr. Shyam Karanth

(Signature of the faculty)

Date: 04-01-2018

Approved by: Dr. Ashalatha Nayak

(Signature of HOD)

Date: Click or tap to enter a date.

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