

COURSE OUTLINE

Course Code: CSE 310

Course Title: Compiler Sessional

Level/Term: 3/1

Section: A & B

Academic Session: 2019-2020

Course Teacher(s):

Name:	Office/Room:	E-mail and Telephone: (optional)
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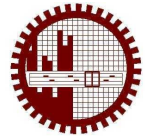
Course Outline: (To be filled from the course handbook)

Laboratory works based on Introduction to compiling; Basic issues; Lexical analysis; Syntax analysis; Syntax-directed translation; Semantic analysis: type-checking; Run-time environments; Intermediate code generation; Code generation; Code optimization and project works using some lexical analyzer and parser designing tools.

Learning Outcomes/Objectives:

After undergoing this course, students should be able to:

- Understand the basic components of a compiler and interaction among them.
- Use tools like flex to generate scanners.
- Use tools like Bison to generate parsers with aim to perform syntax analysis, semantics analysis.
- Construct a simple compiler.
- Develop CFG to recognize a language and Regular Expression to recognize a pattern.



Assessment

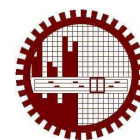
Offline and Online: 60-70%

Attendance: 5 %

Quiz: 25-35%

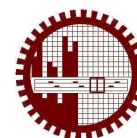
Text and Reference books:

- a. Compilers - Principles, Techniques, and Tools, Aho, Sethi, Ullman
- b. Flex & Bison, John R. Levine
- c. A Compact Guide to Lex & YACC, Thomas Niemann



Weekly schedule:

Week	Date	Topics	Teacher's Initial
Week 1	No class		
Week 2	Sat, March 06, 9:30 AM	Class on Introduction to compiler, Basic issues, Symbol Table Offline-I declaration (Symbol Table)	SMMR
Week3	Regular class time	Evaluation of Offline-I: Subsection B1	All Course Teachers
Week 4	Sat, March 20, 9:30 AM	<i>Offline-II declaration (Lexical Analysis)</i>	SMMR
	Regular class time	Evaluation of Offline-I: Subsection A2, B2	All Course Teachers
Week 5	Regular class time	Evaluation of Offline-I: Subsection A1	All Course Teachers
Week 6	Sat, April 03, 9:30 AM	<i>Offline-III declaration (Syntax & Semantic Analysis)</i>	MMA
	Regular class time	Evaluation of Offline-II: Subsection A2, B2	All Course Teachers
Break due to lockdown and Eid-ul-fitr vacation			
Week 7	No class		
Week 8	Regular class time	Evaluation of Offline-II: Subsection A1, B1	All Course Teachers
Week 9	Regular class time	Evaluation of Offline-III: Subsection A2, B2	All Course Teachers
Week 10	Sat, June 12, 9:30 AM	<i>Offline-IV declaration (Intermediate Code Generation, Optimization)</i>	KMS
	Regular class time	Evaluation of Offline-III: Subsection A1, B1	All Course Teachers
Week 11	No class		
Week 12	Sat, June 26, 9:30 AM	<i>Discussion on Offline-IV (Intermediate Code Generation, Optimization)</i>	All Course Teachers
Week 13	Regular class time	Evaluation of Offline-IV: Subsection A1, B1	All Course



			Teachers
Week 14	Regular class time	Evaluation of Offline-IV: Subsection A2, B2	All Course Teachers
Eid-ul-adha vacation			
Week 15	TBA	Quiz	All Course Teachers

Prepared by :
Name: Concerned course teachers
Signature:
Date: