Compilers

Pralay Mitra
Partha Pratim
Das

Course
Information

CS31003: Compilers & CS39003: Compilers Laboratory

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- Slides will be uploaded to Moodle
- Books:
  - Compilers: Principles, Techniques, and Tools (2nd Edition) by A.V. Aho, Monica S Lam, R. Sethi, Jeffrey D. Ullman (Pearson / Addison-Wesley)
  - Flex and Bison by John Levine (O'Reilly)
  - Compiler Design in C by Allen Holub
  - Advanced Compiler Design and Implementation by Steven Muchnick
- Video:
  - Compiler Design by Y N Srikant, NPTEL

About the Compilers Theory Course

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- MON (11:00–11:55), TUE (08:00–09:55) [Slot B3]:
  - Section 1 (PyM): NR423
  - Section 2 (PPD): NR124
- Evaluation

Mid-semester	30%
End-semester	50%
Two Class Tests	20%

- Attendance: Compulsory
- Meeting Outside Class: By appointment through mail

About the Compilers Laboratory Course

- TUE (02:00–04:55) [Slot L]: SW Lab (Annex)
- Lecture from: 2:30pm in Lab. Select lectures may be held in classrooms with prior announcement
- Evaluation

Assignments	70%
Two Quizzes	30%

- Attendance: Compulsory during lecture hours
- Meeting Outside Class: By appointment through mail
- Zero tolerance to plagiarized submissions

- Moodle will be used for the course. Register on Moodle immediately to:
  - CT2019 CS31003 : Compilers (Key: CT2019)
  - CL2019 CS39003 : Compilers Laboratory (Key: CL2019)
- All assignments / material will be uploaded to Moodle
- All announcements will be made on Moodle. Keep checking
- ERP will also be used at times for communication. Make sure that your registered email at ERP works

The Submissions

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- The submissions for assignments will be accepted *only* through Moodle up to the specified deadline.
- No submission through mail or directly to the TA will be entertained
- Late submissions for up to 3 days are allowed on request with 10% penalty

Laboratory Assignments

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- Assignments #1, #2, #3 and #4 are individual
- Assignments #5 and #6 are in groups of two
- Every student / group will be assigned a TA. This may change with assignments
- Language: C++
- Platform: Unix
- Tools: GNU – Flex, Bison, GCC
- Target Language: tinyC
- Target Architecture: x86-64

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Sl. No.	Description	Assign Date	Submit Date	Weeks
#1	Annotating Assembly	16-Jul-19	22-Jul-19	1
#2	Creating Library	23-Jul-19	05-Aug-19	2
#3	Lexer for tinyC	06-Aug-19	12-Aug-19	1
#4	Parser for tinyC	13-Aug-19	26-Aug-19	2
	Class Test 1 & Lab Quiz 1	27-Aug-19		
#5	TAC Code Generator for tinyC	03-Sep-19	14-Oct-19	3
	Mid-Sem	16-Sep-19	24-Sep-19	
	Autumn Break	05-Oct-19	09-Oct-19	
#6	x86 Code Generator for tinyC	15-Oct-19	01-Nov-19	2
	Class Test 2 & Lab Quiz 2	22-Oct-19		
	End-Sem	18-Nov-19	27-Nov-19	

Assignments are indicative and are likely to change before actually being assigned. The dates are tentative.

Holidays

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**Id-ul-Zuha (BakriId)	12.08.2019	Monday
Independence Day	15.08.2019	Thursday
Muharram	10.09.2019	Tuesday
Mahatma Gandhi's Birthday	02.10.2019	Wednesday
Dussehra (Maha Nabami) (Additional)	07.10.2019	Monday
Dussehra (Vijaya Dashami)	08.10.2019	Tuesday
An Additional day for Dussehra	09.10.2019	Wednesday
Diwali (Deepavali)	27.10.2019	Sunday
Prophet Mohammad' Birthday (Id-E-Milad)	10.11.2019	Sunday
Guru Nanak's Birthday	12.11.2019	Tuesday

TA and Teachers

Sl.#	Name	Email	Mobile
1	Ayush Bansal	abansalgreat@gmail.com	8768889992
2	Gourab Chowdhury	gc2dec@gmail.com	
3	Harikrishna Patibandla	krishnahari051197@gmail.com	9679769963
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10	Partha Pratim Das	ppd@cse.iitkgp.ac.in	9830030880

Important Dates

Class Test 1 & Lab Quiz 1	27-Aug-19, 2–5 pm
Class Test 2 & Lab Quiz 2	22-Oct-19, 2–5 pm
Mid-Sem	16-Sep-19 to 24-Sep-19
End-Sem	18-Nov-19 to 27-Nov-19