

# **Compilers (CS31003)**

## **Compilers Laboratory (CS39003)**

**Autumn 2022-23**

# Course Details

- Theory Teacher
  - Section 1: Pralay Mitra ([pralay@cse.iitkqp.ac.in](mailto:pralay@cse.iitkqp.ac.in))
  - Section 2: Bivas Mitra ([bivas@cse.iitkqp.ac.in](mailto:bivas@cse.iitkqp.ac.in))
- Lecture Hours
  - Mon (11:00-11:55), Tue (08:00-09:55)
- Evaluation
  - TA Evaluation: Marks 20 (Two Class Tests)
  - Mid Semester: Marks 30
  - End Semester: Marks 50
  - Grading will be relative
- Meeting Outside Class: By appointment through mail

# Course Materials

- Slides will be uploaded in Moodle.
  - Please enroll as student in Moodle with password “comp22A”.
- Books:
  - Compilers: Principles, Techniques, and Tools (2E) by A.V. Aho, Monica S Lam, R. Sethi, Jerrey D. Ullman (Pearson / Addison-Wesley)
  - Compiler Design in C by Allen Holub
  - Modern compiler implementation in C by Appel
  - Advanced Compiler Design and Implementation by Muchnick

# Course Details

- Laboratory Teachers
  - Pralay Mitra ([pralay@cse.iitkgp.ernet.in](mailto:pralay@cse.iitkgp.ernet.in))
  - Bivas Mitra ([bivas@cse.iitkgp.ernet.in](mailto:bivas@cse.iitkgp.ernet.in))
- Laboratory Hours
  - Thurs (14:00 - 16:55)
- Evaluation
  - Assignments: Marks 60 (Individual weight of each assignment will be announced later)
  - Lab Tests: Marks 40 (Two Lab Quizzes)
  - Grading will be relative
- Meeting Outside Lab: By appointment through mail
- **Zero tolerance to plagiarized submissions.**

# Course Details

- Assignment and Lab Test submission server is Moodle.
- ◉ Please enroll as student in Moodle with password “comp22A”.
- ◉ All assignments / material will be uploaded to Moodle.
- The submissions will be accepted only through Moodle (up to a Moodle server deadline). **No submission through mail or directly to the TA will be entertained.**
- ERP will also be used at times for communication. Make sure that your registered email at ERP works.
- **Zero tolerance to plagiarized submissions.**

# Laboratory

- Assignments are individual and offline. TA interaction will be there during contact/lab hours.
- Language: C/C++
- Platform: Unix
- Tools: GNU
- Target Architecture: 64-bit
- **Please try to avoid MAC as much as possible.**

# Laboratory (Tentative Schedule)

04-08-22	Assignment 1: Understanding x86-64 Assembly	1 week
11-08-22	Assignment 2: Creation of Library in x86-64 Assembly	2 weeks
25-08-22	Assignment 3: Lexical Analyzer	2 weeks
08-09-22	Assignment 4: Parser	2 weeks
15-09-22	Closing of Asgn 1, 2, 3; Show CT1, LT1 scripts	
13-10-22	Assignment 5: TAC Code Generator	2 weeks
27-10-22	Assignment 6: x86 Code Generator	2 weeks
03-11-22	Closing of Asgn 4, 5; Show CT2, LT2 scripts	
10-11-17	Closing of Asgn 6;	

# Teaching Assistants

TA Name	TA Email Address
Debasree Das	debasreedas1994@gmail.com
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Purnima Gautam	purnimagautam94@gmail.com



# Important Dates

	Date	Event
Schedule of Tests and Examinations	01-Sep-2022 (2pm – 5pm)	Class Test 1
	01-Sep-2022 (2pm – 5pm)	Lab Quiz 1
	September 20 – 29, 2022	MidSem Examination
	20-Oct-2017 (2pm – 5pm)	Lab Quiz 2
	20-Oct-2017 (2pm – 5pm)	Class Test 2
	September 20 – 29, 2022	EndSem Examination

	Date	Event
List of Holidays	09-Aug-22	Muhharam
	15-Aug-22	Independence Day
	18-Aug-22	Institute Foundation Day
	October 03 – 06, 2022	Autumn Break
	24-Oct-22	Deepabali
	08-Nov-22	Guru Nanak Birthday