

I222 Theory of Computation

Heisei 19, Term 2-1(10/4(Thu) ~ 11/30(Fri))

Teacher: Ryuhei UEHARA(Room I67b, uehara@jaist.ac.jp)

Lessons:

- I will use the white board and PowerPoint.
- You have to submit reports in 6 times, and you have to take two examinations.
- In office hours, your reports will be returned, and their answers will be presented by Saito-kun, TA, (toshikis@jaist.ac.jp). Supplementary lessons can be made in this time, although I have no plan to do that up to now.

Dates: Tuesdays 2(11:00 ~ 12:30) and Fridays 1(9:20 ~ 10:50)

Office hour: Fridays 3(13:30 ~ 15:00)

Syllabus: <http://www.jaist.ac.jp/~gakusei/kyoumu/syll116/i222.html>

Supplemental Web page URL: <http://www.jaist.ac.jp/~uehara/course/2007/i222/index.html>

(I sometimes update this page; especially, please check the schedule)

Evaluation: evaluations will be made by the following rate;

- Reports: 6 times, 5 points on each
- Mid-term examination: 35 points
- Final examination: 35 points

Schedule:	Date	Contents	Report	Office Hour
	10/ 5(Fri)	Lesson (1): Elements of Computation		Office hour in Room I67b
	10/ 9(Tue)	Lesson (2): Proof of Unsolvability and Diagonalization Method	Report (1)	
	10/12(Fri)	Lesson (3): Examples of Uncomputable Functions		Answer to the report (1)
	10/16(Tue)	Lesson (4): Enumerable Set	Report (2)	
	10/19(Fri)	Lesson (5): Class REC and Class RE		Answer to the report (2)
	10/23(Tue)	Lesson (6): Reducibility and Completeness	Report (3)	
	10/26(Fri)	Lesson (7): Measure of Computation Time		Answer to the report (3)
	10/30(Tue)	<u>Mid-term Examination</u>		
	11/ 2(Fri)	Lesson (8): Hierarchy Theorem	Report (4)	Answer to the Mid-term Exam.
	11/ 6(Tue)	Lesson (9): Representative Time Complexity Classes		
	11/ 9(Fri)	Lesson (10): Class NP	Report (5)	Answer to the report (4)
	11/13(Tue)	Lesson (11): Relations among Time Complexity Classes		
	11/16(Fri)	Lesson (12): Polynomial-time Reducibility	Report (6)	Answer to the report (5)
	11/20(Tue)	Lesson (13): Completeness Based on Polynomial-time Reducibility		
	11/23(Fri)	Holiday		
	11/27(Tue)	<u>Final Examination</u>		
	11/30(Fri)	reserve date		Answer to the report (6) and Final Exam.

Dates for reports:

	1	2	3	4	5	6
You take it	10/ 9	10/16	10/23	11/ 2	11/ 9	11/16
Deadline	10/12	10/19	10/26	11/ 9	11/16	11/30
Answer	10/12	10/19	10/26	11/ 9	11/16	11/30

Deadline is critical!

Misc.: Some unexpectedly cancel can be announced in this page. So please check it sometimes.