Algorithmic Complexity

CS601A	*Handout 2*
Spring 2003	*11 February, 2003*
Prof. Rebecca N. Wright	*Revised Syllabus*

Location, etc:

Place:	Morton 103
Time:	6:15pm–8:45pm Tuesdays
Professor:	Rebecca Wright, `rwright@cs.stevens-tech.edu`
Office hours:	2-4pm Thursdays *by appointment only*, 213 Lieb

Textbooks:

Christos Papadimitriou, *Computational Complexity*, Addison-Wesley.
Michael Garey and David Johnson, *Computers and Intractability*, W. H. Freeman and Company.
(Reading assignemnts below refer to Padadimitriou except where indicated by G&J.)

Syllabus:

January 21	Introduction, Turing Machines **Reading: ch. 1, 2**
January 28	Computability **Reading: ch. 3**
February 4	HOMEWORK 1 DUE Boolean Logic **Reading: ch. 4**
February 11	Relations between Complexity Classes **Reading: ch. 7**
February 18	Reductions and Completeness **Reading: ch. 8**
February 25	HOMEWORK 2 DUE Reductions and Completeness, ctd. **Reading: G&J ch. 1–3**
March 4	MIDTERM EXAM
March 11	SPRING RECESS: NO CLASS
March 18	NP-Completeness **Reading: ch. 9, G&J ch. 4–5**

March 25	NP-Completeness, cont'd **Reading: G&J ch. 6, browse Appendix**
April 1	HOMEWORK 3 DUE coNP and Function Problems **Reading: ch. 10**
April 8	Randomized Computation **Reading: ch. 11**
April 15	Cryptography **Reading: ch. 12**
April 22	HOMEWORK 4 DUE Approximability **Reading: ch. 13**
April 29	FINAL EXAM

Grading:

Homework Assignments	40%	(lowest score dropped)
Midterm Exam	25%	
Final Exam	25%	
Class Participation	10%	

Late policy:

Assigments are due at the *start* of class on their due dates. Late assignments will not be accepted. All exceptions must be cleared in advance.