



Outlines for  
Theory of Algorithms  
by  
Peter M. Maurer

Text: Baase, Computer Algorithms, Introduction to Design and Analysis

There will be 3 equally weighted exams. Homework will be assigned every day. Homework will count 1/4 of your grade (equivalent to a fourth exam.) *No* programming exercises will be assigned.

1. Jan 9 Algorithms, Functions, Growth Rates
2. Jan 11 Searching an Ordered List
3. Jan 16 Sorting
4. Jan 23 Sorting
5. Jan 25 Sorting
6. Jan 30 Sorting
7. Feb 1 Selection and Adversary Arguments
8. Feb 6 Graphs and Digraphs
9. Feb 8 EXAM
0. Feb 13 Graphs and Digraphs
1. Feb 15 Graphs and Digraphs
2. Feb 20 Graphs and Digraphs
3. Feb 22 Polynomials & Matrices
4. Feb 27 Polynomials & Matrices
5. Mar 1 Polynomials & Matrices
6. Mar 6 NP-Complete Problems
7. Mar 8 NP-Complete Problems
8. Mar 13 EXAM
9. Mar 15 NP-Complete Problems
0. Mar 27 NP-Complete Problems
1. Mar 29 Parallel Algorithms
2. Apr 3 Parallel Algorithms
3. Apr 5 Parallel Algorithms
4. Apr 10 String Matching
5. Apr 12 Dynamic Programming
6. Apr 17 Dynamic Programming
7. Apr 19 Chapter 8  
Final Exam

CIS 6930-798  
ENB ?

COURSE OUTLINE

Spring 1990  
10-11:15AM TR

Peter M. Maurer

ENB 314

974-4758 (home 960-9534)

Hours 2:00 3:00 TR

Text: Baase, Computer Algorithms, Introduction to Design and Analysis

There will be 3 equally weighted exams. Homework will be assigned every day. Homework will count 1/4 of your grade (equivalent to a fourth exam.) *No* programming exercises will be assigned.

1. Jan 9 Algorithms, Functions, Growth Rates
  2. Jan 11 Searching an Ordered List
  3. Jan 16 Sorting
  4. Jan 18 Sorting
  5. Jan 23 Sorting
  6. Jan 25 Sorting
  7. Jan 30 Selection and Adversary Arguments
  8. Feb 1 Graphs and Digraphs
  9. Feb 6 EXAM
  10. Feb 8 Graphs and Digraphs
  11. Feb 13 Graphs and Digraphs
  12. Feb 15 Graphs and Digraphs
  13. Feb 20 Polynomials & Matrices
  14. Feb 22 Polynomials & Matrices
  15. Feb 27 Polynomials & Matrices
  16. Mar 1 NP-Complete Problems
  17. Mar 6 NP-Complete Problems
  18. Mar 8 NP-Complete Problems
  19. Mar 13 EXAM
  20. Mar 15 NP-Complete Problems
  21. Mar 27 Parallel Algorithms
  22. Mar 29 Parallel Algorithms
  23. Apr 3 Parallel Algorithms
  24. Apr 5 String Matching
  25. Apr 10 Dynamic Programming
  26. Apr 12 Dynamic Programming
  27. Apr 17 Chapter 8
  28. Apr 19 Chapter 8
- Final Exam Thursday, Apr 26, 10:30AM-12:30PM

Text: Baase, Computer Algorithms, Introduction to Design and Analysis

There will be 3 equally weighted exams. Each will count 30% of your grade. Homework will be assigned every day. Homework will *not* be graded, but a word to the wise: DO THE HOMEWORK EVERY DAY. The problems given on the exam will be similar to the homework exercises, and the exercises will be much too difficult to do at the last minute, even for the most gifted of students. *No* programming exercises will be assigned, but you will be expected to go to the library and find a paper in a current journal, read the paper, and write a report. The report will be handed in the second-to-last week of class (DATE) and will count for 10% of your grade.

1.	Jan 8	Introduction	Ch. 1
2.	Jan 10	Introduction	
3.	Jan 15	Sorting	Ch. 2
4.	Jan 17	Sorting	
5.	Jan 22	Sorting	
6.	Jan 24	Sorting	
7.	Jan 29	Sorting	
8.	Jan 31	Selection and Adversary Arguments	Ch. 3
9.	Feb 5	EXAM	
10.	Feb 7	Selection and Adversary Arguments	
11.	Feb 12	Graphs and Digraphs	Ch. 4
12.	Feb 14	Graphs and Digraphs	
13.	Feb 19	Graphs and Digraphs	
14.	Feb 21	Graphs and Digraphs	
15.	Feb 26	Graphs and Digraphs	
16.	Feb 28	Polynomials & Matrices	Ch.7
17.	Mar 5	Polynomials & Matrices	
18.	Mar 7	Polynomials & Matrices	
19.	Mar 12	EXAM	
20.	Mar 14	NP-Complete Problems	Ch. 9
21.	Mar 26	NP-Complete Problems	
22.	Mar 28	NP-Complete Problems	
23.	Apr 2	NP-Complete Problems	
24.	Apr 4	Parallel Algorithms	Ch. 10
25.	Apr 9	Parallel Algorithms	
26.	Apr 11	Parallel Algorithms	
27.	Apr 16	Special Topics	Ch. 5, 6, 8
28.	Apr 18	Special Topics	

Final Exam Period Thursday, Apr 25, 6:00 PM- 8:00 PM

Recommended Homework exercises for selected chapters:

Ch. 1: 1.2, 1.7, 1.10, 1.11, 1.12, 1.13, 1.14, 1.16, 1.17, 1.22, 1.24, 1.33, 1.35

Ch. 2: 2.1, 2.2, 2.3, 2.7, 2.8, 2.10, 2.11, 2.14, 2.16, 2.17, 2.18, 2.19, 2.21, 2.22,  
2.23, 2.26, 2.30

Ch. 3: 3.1, 3.4, 3.5, 3.10

Ch. 4: 4.3, 4.9, 4.10, 4.11, 4.12, 4.13, 4.17, 4.18, 4.19, 4.28, 4.30, 4.31, 4.32,  
4.34, 4.42, 4.48, 4.49

Ch. 7: 7.1, 7.3, 7.5, 7.7, 7.8, 7.10, 7.12, 7.13

Ch. 9: 9.1, 9.4, 9.7, 9.9, 9.12, 9.20, 9.23, 9.25, 9.27, 9.30, 9.35, 9.36, 9.37

Ch. 10: 10.1, 10.3, 10.10, 10.14, 10.16

Peter M. Maurer

ENB 314

974-4758 (home 960-9534)

Hours 2:00 3:00 TR

Text: Cormen, Leiserson, Rivest, *Introduction to Algorithms*

A note on prerequisites: This course requires graduate standing, or my permission for enrollment. If you are not a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission PERSONALLY to take this course, ESPECIALLY if you are taking this course through FEEDS. FEEDS students may call my office, all others must see me in person.

There will be 3 equally weighted exams. Each will count 25% of your grade. Homework will be assigned every day. Homework will be assigned every day, and will be graded it will count 15% of your grade. A WORD TO THE WISE: The problems given on the exam will be similar to the homework exercises, and the exercises will be much too difficult to do at the last minute, even for the most gifted of students. *No* programming exercises will be assigned, but you will be expected to go to the library and find a paper in a current journal, read the paper, and write a report. The report will be handed in on APR 16th, 1992. LATE REPORTS WILL NOT BE ACCEPTED! If you anticipate problems with the Apr 16th date, DO THE REPORT NOW!

1.	Jan 9	Mathematical Foundations	Ch. 1-6
2.	Jan 14	Mathematical Foundations	
3.	Jan 16	Mathematical Foundations	
4.	Jan 21	Mathematical Foundations	
5.	Jan 23	Sorting	Ch. 7-9
6.	Jan 28	Sorting	
7.	Jan 30	Sorting	
8.	Feb 4	Selection	Ch. 10
9.	Feb 6	EXAM	
10.	Feb 11	Graph Algorithms	Ch. 23-27
11.	Feb 13	Graph Algorithms	
12.	Feb 18	Graph Algorithms	
13.	Feb 20	Graph Algorithms	
14.	Feb 25	Graph Algorithms	
15.	Feb 27	Graph Algorithms	
16.	Mar 3	NP-Completeness	Ch. 36-37
17.	Mar 5	NP-Completeness	
18.	Mar 10	NP-Completeness	
19.	Mar 12	EXAM	
20.	Mar 24	NP-Completeness	
21.	Mar 26	NP-Completeness	
22.	Mar 31	Parallel Algorithms	Ch. 30
23.	Apr 2	Parallel Algorithms	
24.	Apr 7	Parallel Algorithms	
25.	Apr 9	Matrix Algorithms	Ch. 31
26.	Apr 14	Matrix Algorithms	
27.	Apr 16	FFT	Ch. 32
28.	Apr 21	String Matching	Ch. 34
29.	Apr 23	Arithmetic Circuits	Ch. 29
		Final Exam Period TO BE ANNOUNCED!	

CIS 6930  
ENB 110

Theory of Algorithms  
Course Outline

Spring 1993  
10:30-11:50AM TR

Peter M. Maurer

ENB 314

974-4758 (home 960-9534)

Hours 2:00 3:00 TR

Text: Sara Baase, *Computer Algorithms: Introduction to Design and Analysis*

A note on prerequisites: This course requires graduate standing, or my permission for enrollment. If you are not a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission PERSONALLY to take this course, ESPECIALLY if you are taking this course through FEEDS. FEEDS students may call my office, all others must see me in person.

There will be 3 exams, The first two exams will count 25% of your grade. The third exam will be comprehensive and will count 40% of your grade. Homework will be assigned every day (if I remember). It will be graded and will count 10% of your grade. No programming exercises will be assigned.

A WORD TO THE WISE: The problems given on the exam will be similar to the homework exercises, and the exercises will be much too difficult to do at the last minute, even for the most gifted students.

1.	Jan 7	Mathematical Foundations	Ch. 1
2.	Jan 12	Mathematical Foundations	
3.	Jan 14	Mathematical Foundations	
4.	Jan 19	Mathematical Foundations	
5.	Jan 21	Sorting	Ch. 2
6.	Jan 26	Sorting	
7.	Jan 28	Sorting	
8.	Feb 2	Adversary Arguments	Ch. 3
9.	Feb 4	EXAM	
10.	Feb 9	Graph Algorithms	Ch. 4
11.	Feb 11	Graph Algorithms	And Notes
12.	Feb 16	Graph Algorithms	
13.	Feb 18	Graph Algorithms	
14.	Feb 23	Graph Algorithms	
15.	Feb 25	Graph Algorithms	
16.	Mar 2	NP-Completeness	Ch. 9
17.	Mar 4	NP-Completeness	And Notes
18.	Mar 9	NP-Completeness	
19.	Mar 11	EXAM	
20.	Mar 23	NP-Completeness	
21.	Mar 25	NP-Completeness	
22.	Mar 30	Parallel Algorithms	Ch. 10
23.	Apr 1	Parallel Algorithms	
24.	Apr 6	Parallel Algorithms	
25.	Apr 8	Matrix Algorithms	Ch. 7
26.	Apr 13	Matrix Algorithms	
27.	Apr 15	FFT	Ch. 7
28.	Apr 20	String Matching	Ch. 5
29.	Apr 22	String Matching	
		Final Exam Period TO BE ANNOUNCED!	

CIS 6930  
ENB 110

Theory of Algorithms  
Course Outline

Spring 1994  
9:30-10:50AM MW

Peter M. Maurer      ENB 314      974-4758 (home 960-9534)      Hours 11:00 12:00 MT  
EMAIL: local: maurer    remote: maurer@turandot.csee.usf.edu

I normally maintain an open door policy with respect to office visits. You are welcome to come by at any time. The door will be closed -- knock and it will be opened.

TA: Kiran Doreswamy (Kiran):    Hours 2-4 pm Fridays, RM 327.  
EMAIL: local: kiran    remote: kiran@eggo.csee.usf.edu

Text: Sara Baase, *Computer Algorithms: Introduction to Design and Analysis*

Prerequisites: This course requires graduate standing, or my permission for enrollment. If you are *not* a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission PERSONALLY to take this course, ESPECIALLY if you are taking this course through FEEDS. FEEDS students may call my office, all others must see me in person.

There will be 3 exams. The first two exams will count 25% of your grade. The third exam will be comprehensive and will count 40% of your grade. Homework will be assigned every day (if I remember). It will be graded and will count 10% of your grade. *No* programming exercises will be assigned.

1.	Jan 10	Mathematical Foundations	Ch. 1
2.	Jan 12	Mathematical Foundations	
4.	Jan 19	Mathematical Foundations	
5.	Jan 24	Sorting	Ch. 2
6.	Jan 26	Sorting	
7.	Jan 31	Sorting	
8.	Feb 2	Adversary Arguments	Ch. 3
9.	Feb 7	EXAM	
10.	Feb 9	Graph Algorithms	Ch. 4
11.	Feb 14	Graph Algorithms	And Notes
12.	Feb 16	Graph Algorithms	
13.	Feb 21	Graph Algorithms	
14.	Feb 23	Graph Algorithms	
15.	Feb 28	Graph Algorithms	
16.	Mar 2	NP-Completeness	Ch. 9
17.	Mar 7	NP-Completeness	And Notes
18.	Mar 9	EXAM (Last Day to Drop!!)	
19.	Mar 21	NP-Completeness	
20.	Mar 23	NP-Completeness	
21.	Mar 28	NP-Completeness	
22.	Mar 30	Parallel Algorithms	Ch. 10
23.	Apr 4	Parallel Algorithms	
24.	Apr 6	Parallel Algorithms	
25.	Apr 11	Matrix Algorithms	Ch. 7
26.	Apr 13	Matrix Algorithms	
27.	Apr 18	FFT	Ch. 7
28.	Apr 20	String Matching	Ch. 5
29.	Apr 25	String Matching	
		Final Exam Period FRIDAY APR 29, 8:00-10:00 AM	

CIS 6930  
ENB 110

Theory of Algorithms  
Course Outline

Spring 1995  
8:00-9:15AM MW

Peter M. Maurer      ENB 314      974-4758 (home 960-9534)      Hours 11:00 12:00 MT  
EMAIL: local: maurer    remote: maurer@turandot.csee.usf.edu

I normally maintain an open door policy with respect to office visits. You are welcome to come by at any time. The door will be closed -- knock and it will be opened.

TA: TBA.

Text: Cormen, Leiserson, Rivest, *Introduction to Algorithms*

Prerequisites: This course requires graduate standing, or my permission for enrollment. If you are *not* a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission PERSONALLY to take this course, ESPECIALLY if you are taking this course through FEEDS. FEEDS students may call my office, all others must see me in person.

There will be 3 exams. The first two exams will count 25% of your grade. The third exam will be comprehensive and will count 40% of your grade. Homework will be assigned every day (if I remember). It will be graded and will count 10% of your grade. *No* programming exercises will be assigned.

1.	Jan 9	Mathematical Foundations	Ch. 1, Ch. 2
2.	Jan 11	Mathematical Foundations	Ch 3, Ch 4
.	Jan 16	HOLIDAY: Martin Luther King day	
3.	Jan 18	Mathematical Foundations	Ch 5, Ch 6
4.	Jan 23	Sorting	Notes
5.	Jan 25	Sorting	Ch.8
6.	Jan 30	Sorting	Ch 7
7.	Feb 1	Sorting	Ch 9
8.	Feb 6	Graph Algorithms	Ch. 23
9.	Feb 8	Graph Algorithms	Ch. 24
10.	Feb 13	EXAM	
11.	Feb 15	Graph Algorithms	Ch. 25
12.	Feb 20	Graph Algorithms	Ch. 26
13.	Feb 22	Graph Algorithms	Ch. 27
14.	Feb 27	Graph Algorithms	Notes
15.	Mar 1	NP-Completeness	Ch 36
16.	Mar 6	NP-Completeness	Ch 36
17.	Mar 8	NP-Completeness	Ch 37
	Mar 10	LAST DAY TO DROP (Friday, No class today)	
	Mar 13	HOLIDAY: Spring Break	
	Mar 15	HOLIDAY Spring Break	
18.	Mar 20	NP-Completeness	
19.	Mar 22	NP-Completeness	Notes
20.	Mar 27	EXAM	
21.	Mar 29	Parallel Algorithms	Ch 30
22.	Apr 3	Parallel Algorithms	Ch 30
23.	Apr 5	Parallel Algorithms	Ch 30
24.	Apr 10	Matrix Algorithms	Ch. 31
25.	Apr 12	Matrix Algorithms	Ch. 31
26.	Apr 17	FFT	Ch. 32
27.	Apr 19	String Matching	Ch. 34
28.	Apr 24	String Matching	Ch 34
29.	Apr 26	Arithmetic Circuits	Ch 29

Final Exam Period WEDNESDAY MAY 3, 8:00-10:00 AM

## **Chapter 2**

Page 31: 2.1-1, 2.1-2, 2.1-4  
Page 37: 2.2-1, 2.2-4, 2.2-5, 2.2-7  
Page 38: 2-2, 2-3  
Page 39: 2-4

## **Chapter 3**

Page 45: 3.1-1, 3.1-3  
Page 52: Problem 3-1.

## **Chapter 4**

Page 56: 4.1-1, 4.1-5  
Pages 60-61: 4.2-1, 4.2-3  
Page 64: 4.3-1, 4.3-2, 4.3-3  
Pages 72-75: 4-1, 4-4

## **Chapter 5**

Page 81: 5.1-2  
Page 83: 5.2-1, 5.2-2, 5.2-3

## **Chapter 6**

Page 103: 6.1-1, 6.1-3, 6.1-5, 6.1-6  
Page 109: 6.2-2, 6.2-3  
Page 114: 6.3-1, 6.3-2, 6.3-3

**CIS 6930**  
**ENB 110**

**Theory of Algorithms**  
**Course Outline**

**Spring 1996**  
**12:30-1:50 TR**

**Peter M. Maurer** ENB 314 974-4758 (home 960-9534)  
**EMAIL:** local: maurer remote: maurer@usf.edu

Hours 11:00 12:00 MT

I normally maintain an open door policy with respect to office visits. You are welcome to come by at any time. The door will be closed -- knock and it will be opened.

**TA:** Mingrui Zhang, Office Hrs: TR 2:00-4:00PM, or by appointment. mzhang@grad.csee.usf.edu

**Text:** Cormen, Leiserson, Rivest, *Introduction to Algorithms*

Garey, Johnson, *Computers and Intractability, A Guide to the Theory of NP-Completeness.*

**Prerequisites:** This course requires graduate standing, or my permission for enrollment. If you are *not* a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission PERSONALLY to take this course, ESPECIALLY if you are taking this course through FEEDS. FEEDS students may call my office, all others must see me in person.

There will be 3 exams. The first two exams will count 25% of your grade. The third exam will be comprehensive and will count 40% of your grade. Homework will be assigned every day (if I remember). It will be graded and will count 10% of your grade. *No* programming exercises will be assigned.

1.	Jan 9	Mathematical Foundations	Ch. 1, Ch. 2
2.	Jan 11	Mathematical Foundations	Ch 3, Ch 4
3.	Jan 16	Mathematical Foundations	Ch 5, Ch 6
4.	Jan 18	Mathematical Foundations	Notes
5.	Jan 23	Sorting	Notes
6.	Jan 25	Sorting	Ch.8
7.	Jan 30	Sorting	Ch 7
8.	Feb 1	Sorting	Ch 9
9.	Feb 6	Graph Algorithms	Ch. 23
10.	Feb 8	Graph Algorithms	Ch. 24
11.	Feb 13	EXAM	
12.	Feb 15	Graph Algorithms	Ch. 25
13.	Feb 20	Graph Algorithms	Ch. 26
14.	Feb 22	Graph Algorithms	Ch. 27
15.	Feb 27	Graph Algorithms	Notes
16.	Feb 29	NP-Completeness	Ch 36
17.	Mar 5	NP-Completeness	Ch 36
18.	Mar 7	NP-Completeness	Ch 37
	Mar 12	HOLIDAY: Spring Break	
	Mar 14	HOLIDAY Spring Break	
19.	Mar 19	NP-Completeness	
20.	Mar 21	NP-Completeness	Notes
21.	Mar 26	EXAM	
22.	Mar 28	Parallel Algorithms	Ch 30
23.	Apr 2	Parallel Algorithms	Ch 30
24.	Apr 4	Parallel Algorithms	Ch 30
25.	Apr 9	Matrix Algorithms	Ch. 31
26.	Apr 11	Matrix Algorithms	Ch. 31
27.	Apr 16	FFT	Ch. 32
28.	Apr 18	String Matching	Ch. 34
29.	Apr 23	String Matching	Ch 34
30.	Apr 25	Arithmetic Circuits	Ch 29

Final Exam Period MONDAY APRIL 29, 1:00-3:00 PM

TEUSDAY APRIL 30 1:00-3:00 PM

**CIS 6930-003**  
**CHE 104**

**Theory of Algorithms**  
**Course Outline**

**Fall 1996**  
**12:30-1:45 MW**

**Peter M. Maurer** ENB 314 974-4758 (home 960-9534)  
**EMAIL:** local: maurer remote: maurer@usf.edu

Hours 3:00-4:00 PM MTW

I normally maintain an open door policy with respect to office visits. You are welcome to come by at any time. The door will be closed -- knock and it will be opened.

**TA:** TBA

**Text:** Cormen, Leiserson, Rivest, *Introduction to Algorithms*  
Garey, Johnson, *Computers and Intractability, A Guide to the Theory of NP-Completeness.*

**Prerequisites:** This course requires graduate standing, or my permission for enrollment. If you are *not* a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission **PERSONALLY** to take this course.

There will be 3 exams. The first two exams will count 25% of your grade. The third exam will be comprehensive and will count 40% of your grade. Homework will be assigned every day (if I remember). It will be graded and will count 10% of your grade. *No* programming exercises will be assigned.

1.	Aug 26	Mathematical Foundations	Ch. 1, Ch. 2
2.	Aug 28	Mathematical Foundations	Ch 3, Ch 4
	Sept 2	HOLIDAY	
3.	Sept 4	Mathematical Foundations	Ch 5, Ch 6
4.	Sept 9	Mathematical Foundations	Notes
5.	Sept 11	Sorting	Notes
6.	Sept 16	Sorting	Ch.8
7.	Sept 18	Sorting	Ch 7
8.	Sept 23	Sorting	Ch 9
9.	Sept 25	Graph Algorithms	Ch. 23
10.	Sept 30	Graph Algorithms	Ch. 24
11.	Oct 2	EXAM	
12.	Oct 7	Graph Algorithms	Ch. 25
13.	Oct 9	Graph Algorithms	Ch. 26
14.	Oct 14	Graph Algorithms	Ch. 27
15.	Oct 16	Graph Algorithms	Notes
16.	Oct 21	NP-Completeness	Ch 36
17.	Oct 23	NP-Completeness	Ch 36
18.	Oct 28	NP-Completeness	Ch 37
19.	Oct 30	NP-Completeness	Notes
20.	Nov 4	NP-Completeness	Notes
21.	Nov 6	EXAM	
	Nov 11	Holiday	
22.	Nov 13	Parallel Algorithms	Ch 30
23.	Nov 18	Parallel Algorithms	Ch 30
24.	Nov 20	Parallel Algorithms	Ch 30
25.	Nov 25	Matrix Algorithms	Ch. 31
26.	Nov 27	Matrix Algorithms	Ch. 31
27.	Dec 2	FFT	Ch. 32
28.	Dec 4	String Matching	Ch. 34
29.	Dec 9	String Matching	Ch 34

Final Exam Period: FRIDAY December 13, 1:00-3:00 PM



**What Language is this,  
Anyway?**

**COT 6405**  
**ENB 110**

**Theory of Algorithms**  
**Course Outline**

**Fall 1997**  
**12:30-1:45 TR**

**Peter M. Maurer** ENB 314 974-4758 (home 960-9534)  
**EMAIL:** local: maurer remote: maurer@csee.usf.edu

Hours 3:00-4:00 PM MTW

I normally maintain an open door policy with respect to office visits. You are welcome to come by at any time. The door will be closed -- knock and it will be opened.

**TA:** Wallon Henriques, Off Hr: W 11:00-12:00 TA Room, Ph 974-2170

**Text:** Cormen, Leiserson, Rivest, *Introduction to Algorithms*

Garey, Johnson, *Computers and Intractability, A Guide to the Theory of NP-Completeness.*

**Prerequisites:** This course requires graduate standing, or my permission for enrollment. If you are *not* a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission PERSONALLY to take this course.

There will be 3 exams. The first two exams will count 25% of your grade. The third exam will be comprehensive and will count 40% of your grade. Homework will be assigned every day (if I remember). It will be graded and will count 10% of your grade. No programming exercises will be assigned.

1.	Aug 26	Mathematical Foundations	Ch. 1, Ch. 2
2.	Aug 28	Mathematical Foundations	Ch 3, Ch 4
3.	Sept 2	Mathematical Foundations	Ch 5, Ch 6
4.	Sept 4	Mathematical Foundations	Notes
5.	Sept 9	Mathematical Foundations	Notes
6.	Sept 11	Sorting	Notes
7.	Sept 16	Sorting	Ch.8
8.	Sept 18	Sorting	Ch 7
9.	Sept 23	Sorting	Ch 9
10.	Sept 25	Graph Algorithms	Ch. 23
11.	Sept 30	Graph Algorithms	Ch. 24
12.	Oct 2	EXAM	
13.	Oct 7	Graph Algorithms	Ch. 25
14.	Oct 9	Graph Algorithms	Ch. 26
15.	Oct 14	Graph Algorithms	Ch. 27
16.	Oct 16	Graph Algorithms	Notes
17.	Oct 21	NP-Completeness	Ch 36
18.	Oct 23	NP-Completeness	Ch 36
19.	Oct 28	NP-Completeness	Ch 37
20.	Oct 30	NP-Completeness	Notes
21.	Nov 4	NP-Completeness	Notes
22.	Nov 6	EXAM	
	Nov 11	Holiday	
23.	Nov 13	Parallel Algorithms	Ch 30
24.	Nov 18	Parallel Algorithms	Ch 30
25.	Nov 20	Parallel Algorithms	Ch 30
26.	Nov 25	Matrix Algorithms	Ch. 31
27.	Nov 27	Matrix Algorithms	Ch. 31
28.	Dec 2	FFT	Ch. 32
29.	Dec 4	String Matching	Ch. 34

Final Exam Period: THURSDAY December 11, 1:00-3:00 PM



**The Adventure Begins!**

**COT 6405**  
**ENB 105**

**Theory of Algorithms**  
**Course Outline**

**Spring 1998**  
**9:30-10:45 MW**

**Peter M. Maurer** ENB 314 974-4758 (home 960-9534)  
**EMAIL:** local: maurer remote: maurer@csee.usf.edu

Hours 3:00-4:00 PM MTW

I normally maintain an open door policy with respect to office visits. You are welcome to come by at any time. The door will be closed -- knock and it will be opened.

**TA:** Wallon Henriques, Off Hr: W 11:00-12:00 TA Room, Ph 974-2170

**Text:** Cormen, Leiserson, Rivest, *Introduction to Algorithms*

Garey, Johnson, *Computers and Intractability, A Guide to the Theory of NP-Completeness.*

**Prerequisites:** This course requires graduate standing, or my permission for enrollment. If you are *not* a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission PERSONALLY to take this course.

There will be 3 exams. The first two exams will count 25% of your grade. The third exam will be comprehensive and will count 40% of your grade. Homework will be assigned every day (if I remember). It will be graded and will count 10% of your grade. *No* programming exercises will be assigned.

1.	Jan 5	Mathematical Foundations	Ch. 1, Ch. 2
2.	Jan 7	Mathematical Foundations	Ch 3, Ch 4
3.	Jan 12	Mathematical Foundations	Ch 5, Ch 6
4.	Jan 14	Mathematical Foundations	Notes
5.	Jan 21	Mathematical Foundations	Notes
6.	Jan 26	Sorting	Notes
7.	Jan 28	Sorting	Ch.8
8.	Feb 2	Sorting	Ch 7
9.	Feb 4	Sorting	Ch 9
10.	Feb 9	EXAM	
11.	Feb 11	Graph Algorithms	Ch. 23
12.	Feb 16	Graph Algorithms	Ch. 24
13.	Feb 18	Graph Algorithms	Ch. 25
14.	Feb 23	Graph Algorithms	Ch. 26
15.	Feb 25	Graph Algorithms	Ch. 27
16.	Mar 2	Graph Algorithms	Notes
17.	Mar 4	NP-Completeness	Ch 36
18.	Mar 16	NP-Completeness	Ch 36
19.	Mar 18	NP-Completeness	Ch 37
20.	Mar 23	EXAM	
21.	Mar 25	NP-Completeness	Notes
22.	Mar 30	NP-Completeness	Notes
23.	Apr 1	NP-Completeness	Notes
24.	Apr 6	NP-Completeness	Notes
25.	Apr 8	NP-Completeness	Notes
26.	Apr 13	Parallel Algorithms	Ch 30
27.	Apr 15	Parallel Algorithms	Ch 30
28.	Apr 20	Matrix Algorithms	Ch 31
29.	Apr 22	EXAM	



**The Adventure Begins!**

**COT 6405**  
**ENB 113**

**Theory of Algorithms**  
**Course Outline**

**Fall 1998**  
**2:30-3:45 MW**

**Peter M. Maurer** ENB 314 974-4758 (home 960-9534)  
**EMAIL:** local: maurer remote: maurer@csee.usf.edu

Hours 2:00-3:00 PM TRF

I normally maintain an open door policy with respect to office visits. You are welcome to come by at any time. The door will be closed -- knock and it will be opened.

**TA:** Rajani Yelkur, Off Hr: M 10:00-11:00 Room ENB 329, Email: yelkur@csee.usf.edu

**Text:** Cormen, Leiserson, Rivest, *Introduction to Algorithms*

**Recommended:** Garey, Johnson, *Computers and Intractability, A Guide to the Theory of NP-Completeness.*

**Prerequisites:** This course requires graduate standing, or my permission for enrollment. If you are *not* a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission PERSONALLY to take this course.

There will be 3 exams. The first two exams will count 25% of your grade. The third exam will be comprehensive and will count 40% of your grade. Homework will be assigned every day (if I remember). It will be graded and will count 10% of your grade. *No* programming exercises will be assigned.

1.	Aug 24	Mathematical Foundations	Ch. 1, Ch. 2
2.	Aug 26	Mathematical Foundations	Ch 3, Ch 4
3.	Sept 2	Mathematical Foundations	Ch 5, Ch 6
4.	Sept 9	Mathematical Foundations	Notes
5.	Sept 14	Mathematical Foundations	Notes
6.	Sept 16	Sorting	Notes
7.	Sept 21	Sorting	Ch.8
8.	Sept 23	Sorting	Ch 7
9.	Sept 28	Sorting	Ch 9
10.	Sept 30	EXAM	
11.	Oct 5	Graph Algorithms	Ch. 23
12.	Oct 7	Graph Algorithms	Ch. 24
13.	Oct 12	Graph Algorithms	Ch. 25
14.	Oct 14	Graph Algorithms	Ch. 26
15.	Oct 19	Graph Algorithms	Ch. 27
16.	Oct 21	Graph Algorithms	Notes
17.	Oct 26	NP-Completeness	Ch 36
18.	Oct 28	NP-Completeness	Ch 36
19.	Nov 2	NP-Completeness	Ch 37
20.	Nov 4	EXAM	
21.	Nov 9	NP-Completeness	Notes
22.	Nov 16	NP-Completeness	Notes
23.	Nov 18	NP-Completeness	Notes
24.	Nov 23	NP-Completeness	Notes
25.	Nov 25	NP-Completeness	Notes
26.	Nov 30	Parallel Algorithms	Ch 30
27.	Dec 2	Parallel Algorithms	Ch 30

The final examination will be held during finals week.  
FINAL: 3:30-5:30 Thursday Dec. 9<sup>th</sup>.



**Off to Explore Strange New Worlds!**

**COT 6405**  
**ENB 110**

**Theory of Algorithms**  
**Course Outline**

**Fall 1999**  
**6:00-7:15PM TR**

**Peter M. Maurer** ENB 314 974-4758/760-0276 (home 960-9534) Hours 10:00-11:00 PM TRF  
**EMAIL:** maurer@csee.usf.edu

I normally maintain an open door policy with respect to office visits. You are welcome to come by at any time. The door will be closed -- knock and it will be opened.

**TA:** TBA

**Texts:** Cormen, Leiserson, Rivest, *Introduction to Algorithms*  
Garey, Johnson, *Computers and Intractability, A Guide to the Theory of NP-Completeness.*

**Prerequisites:** This course requires graduate standing, or my permission for enrollment. If you are *not* a Computer Science/Engineering graduate student who has been formally accepted by the department of Computer Science and Engineering, then you must get my permission **PERSONALLY** to take this course.

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5.	Sept 7	Mathematical Foundations	Notes
6.	Sept 9	Sorting	Notes
7.	Sept 14	Sorting	Ch.8
8.	Sept 16	Sorting	Ch 7
9.	Sept 21	Sorting	Ch 9
10.	Sept 23	EXAM	
11.	Sept 28	Graph Algorithms	Ch. 23
12.	Sept 30	Graph Algorithms	Ch. 24
13.	Oct 5	Graph Algorithms	Ch. 25
14.	Oct 7	Graph Algorithms	Ch. 26
15.	Oct 12	Graph Algorithms	Ch. 27
16.	Oct 14	Graph Algorithms	Notes
17.	Oct 19	NP-Completeness	Ch 36
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20.	Oct 28	EXAM	
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23.	Nov 9	NP-Completeness	Notes
24.	Nov 16	NP-Completeness	Notes
25.	Nov 18	NP-Completeness	Notes
26.	Nov 23	NP-Completeness	Notes
27.	Nov 30	Parallel Algorithms	Ch 30
28.	Dec 2	Parallel Algorithms	Ch 30

Knowledge comes in stages.

The final examination will be held during finals week. At the time determined by the FEEDS office.

**FINAL: TBA.**



