

Wagner College
CS 325 – THEORY OF COMPUTATION

TEXTBOOK: *Theory of Computing. A Gentle Introduction*,
By Kinber and Smith, Prentice Hall (required)
Introduction to Automata Theory, Languages and Computation,
By Hopcroft, Motwani, and Ullman, Addison Wesley (strongly suggested)

INSTRUCTOR: Dr. Adrian Ionescu <http://www.wagner.edu/faculty/users/ionescu/>

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OFFICE: Room 117, Megerle Science Hall, x3245

OFFICE HOURS: MWF 09:00 – 10:20 AM
TTH 04.00 – 6:00 PM (by appointment only)

COURSE WEB PAGE: <http://ionescu.pageout.net/>

COURSE OBJECTIVES: This course covers the mathematical foundations of computer science. Formal languages are introduced, e.g., regular languages, context-free languages, context-sensitive languages, etc. Associated automata are also studied, e.g., finite automata, pushdown automata, and linear-bound Turing machines.

OUTLINE: Chapter 1 – Introduction
Chapter 2 – Finite Automata
Chapter 3 – Context-Free Languages
Chapter 4 – Turing Machines
Chapter 5 – Undecidability
Chapter 6 – Computational Complexity

GRADING POLICY: You are responsible for all material covered in class, as well as that in the text. Homework will be collected and graded weekly.

- MIDTERM (30%)
- FINAL EXAMINATION (40%)
- HOMEWORK/PROJECTS/CLASS PARTICIPATION (30%)

GRADING SCALE: Letter grades will be determined by the following scale, where 100 corresponds to the highest point total earned by any student in the class:

| Average | Grade |
|----------|-------|
| 93 - 100 | A |
| 90 - 92 | A- |
| 87 - 89 | B+ |
| 83 - 86 | B |
| 80 - 82 | B- |
| 77 - 79 | C+ |
| 73 - 76 | C |
| 70 - 72 | C- |
| 67 - 69 | D+ |
| 60 - 66 | D |
| < 60 | F |

COURSE POLICIES:

- There will be no make-up examinations. *A student who is unable to attend a major examination due to illness or other emergency is required to contact his instructor within 24 hours of the exam time.* If an exam is missed due to an emergency, the final will be counted twice; once as a final, and once in place of the missed exam. Late homework will not be graded.
- Any preceding policies may be waived at my discretion

For inclement weather updates or other announcements please check your e-mail and the following page regularly: <http://www.wagner.edu/faculty/users/ionescu/notes.htm>.

If you have a disability for which you may be requesting an accommodation, you are encouraged to contact both your instructor and Dina Assante in the Academic Advisement Center, 390-3278 as early as possible in the term.