

**Wagner College**  
**CS 456 – COMPILERS**

TEXTBOOK: *Compilers. Principles, Techniques and Tools*, By Aho, Sethi, Ullman,  
John Wiley (required)

*lex & yacc*, By Levine, Mason, Brown, O'Reilly (strongly recommended)

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

EMAIL: [ionescu@wagner.edu](mailto:ionescu@wagner.edu)

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 focuses on principles of design and implementation of modern compilers. Topics include lexical analysis, parsing, code generation, error detection and recovery, and optimization. Particular emphasis is put on LL and LR parsing and on automatic parser generators such as flex/bison.

COURSE OUTLINE:

Chapter 1 – Introduction to Compiling  
Chapter 2 – A Simple One-Pass Compiler  
Chapter 3 – Lexical Analysis  
Chapter 4 – Syntax Analysis  
Chapter 5 – Syntax-Directed Translation  
Chapter 8 – Intermediate Code Generation  
Chapter 9 – Code Generation  
Chapter 10 – Code Optimization

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.