State University of New York Polytechnic Institute
CS 480: Compiler Design

Instructor:	Dr. Chen-Fu Chiang
Semester:	Summer 2017
Office Hours:	By appointment
Office:	Kunsela C225
Email:	chiangc@sunyit.edu
Phone:	315-792-7379

Text
Torben Ægidius Mogensen, Basics of Complier Design, Anniveray Edition
http://www.diku.dk/∼torbenm/Basics/basics_lulu2.pdf

Course Description
This course is designed for computer science students and is intended to introduce them to the fundamental concepts of compiler construction. Compiler construction is an important branch of computer science. Studying the parts of a compiler and compiling process is essential in the understanding of any language. We will study basic concepts of formal languages and automata theory and their applications in compiler writing. Several practical parsing methods are discussed.

Course Outcomes

- Design and convert between automata
- Implement automata models in code
- Lexically analyze input for some language
- Parse input for some language
- Utilize lexical and parser generation
- Design and implement a language translator or interactive language terminal

Grading (Tentative)
Assessment of student performance will use a criterion-referenced model which will include written assignments and examinations. The final grade is based on the average of homework assignments (problem sets and discussion forum) and examinations. Participation in the weekly discussion forum is part of the homework assignment. Homeworks are with both written and programming parts. Each homework is centered around deepening your understanding of the theoretical concepts.The examinations will test your knowledge and problem-solving skills on all preceding lectures and homeworks. Late assignment and report will not be accepted unless you have made prior arrangements with me. The acceptable format of your solution will be specified in the assignment. A typical grading scale will be as follows:

Percent	Grade
[89.5 - 100]	A
[79.5 - 89.5)	B

[69.5 - 79.5) C
[59.5 - 69.5) D
Below 59.5 F
(+/- modifiers will also be used ; for instance, [95.5-100]: A+, [92.5-95.5): A, [89.5-92.5): A-)

Notes from the instructor
Welcome! Each week we will have (a) lecture notes/slides to study and (b) a discussion forum in which you **must participate**. To participate in the forum, each week you must answer the questions raised by the instructor and reply to at least one post by your peer classmates. The assignments will be given on a weekly basis (or biweekly, based on the progress of students' understanding of the material). If you have any questions regarding the lecture notes or the homework assignment, please feel free to post your questions in the discussion forum for effective communication. It is also expected that the solutions on the turned in problem set are concisely written. No late assignment is acceptable.

Academic Integrity/Policy
Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at **least in an F** for that assignment (and may, depending on the severity of the case, lead to an F for the entire course). I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, **do not** cheat by giving answers to others or taking them from anyone else. The code of academic conduct is detailed in the SUNY Poly student handbook. Make-ups are only given under **extreme circumstances**. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

Accommodations for Students with Disabilities registered at SUNY Polytechnic Institute
In compliance with the Americans with Disabilities Act of 1990 and with Section 504 of the Rehabilitation Act, SUNY Polytechnic Institute is committed to ensuring educational access and accommodations for all its registered students seeking access to meet course requirements and fully participate in programs or activities. SUNY Poly students with documented disabilities and medical conditions are encouraged to request these services by registering with the Disability Services Office and discussing your need for accommodations. For information or an appointment contact Suzanne Sprague at the Disability Services Office, located in Utica room B101 Kunsela Hall, in Albany in the Student Services Suite 1602 Nano Fab East, or by phone (315) 792-7170; or e-mail suzanne.sprague@sunyit.edu.