## **Syllabus**

# CSC 480/580 Digital Logic & Computer Design Spring 2006 term

Class meets MWF afternoons from 1:30 to 3:00 pm at the Science Building, room 202... as needed. This is independent study, after all.

Our first class meeting is Monday March 27, 2006 at 1:30 pm.

### **Description**

CSC 480 continues the design of logic and computers from where CSC 220 and 230 leave off. Major themes include:

- Combinational logic design and optimization
- Finite state machine design
- Arithmetic functions
- Register transfer level (RTL) design
- Hardware Description Languages (HDL's)
- Computer design fundamentals
- And more!

In your class project, you will take one of these topic areas and research them to a greater depth, presenting your findings to the class.

There is also a lab; you will build small design examples using a breadboard kit.

The prerequisites are CSC 220 and CSC 230. The perquisites are too many to be listed.

#### **Textbook**

The required text for CSC 480 is:

 "Logic and Computer Design Fundamentals, Third Edition" by M. Morris Mano & Charles R. Kime

The publisher's web site is: <a href="http://www.writphotec.com/mano/">http://www.writphotec.com/mano/</a>

#### Instructor

My name is Bill Krieger. I am a part-time professor in the Computer Science department at North Central College.

My email is <a href="wtkrieger@noctrl.edu">wtkrieger@noctrl.edu</a> and my North Central site is william.krieger.faculty.noctrl.edu.

My office is located at 310D Carnegie. We will negotiate office hours in our first class meeting. In any case, you can always email me, and we will work out a convenient time for us to meet.

#### **Grades**

Your final grade will be comprised of:

- Class work (homework) 10%
- Project 20%
- Midterm exam 30%
- Final exam 40%

Your lab grade is pass/fail... do all the labs and you pass.

The college rules on academic integrity will be strictly enforced. Please see the North Central College's policy regarding plagiarism if you have any further questions.

The standard North Central grading scale is:

A	B+	C+	D
93-100%	87-89%	77-79%	60-69%
A-	B	C	F
90-92%	83-86%	73-76%	0-59%
	B- 80-82%	C- 70-72%	

#### The Plan

We have some flexibility as an independent study class, so we will develop the plan in our first couple meetings. I expect that we will cover most of the material in the Mano text over this spring.