

### Course Information

Location and Time: Manchester 241, MWF 10:00-10:50a (Aug 31 – Dec 9)

### Instructor

Prof. Samuel (Sam) Cho

Office Location: Olin 301B

Office Hours: W 2:00p-2:50p or by appointment

Email: [choss@wfu.edu](mailto:choss@wfu.edu)

### Course Overview

An introduction to concepts and development of general purpose parallel programming on Graphics Processing Units (GPUs) using the CUDA programming language. Prerequisites: CSC 112 and MTH 121.

### Textbook

Programming Massively Parallel Processors, A Hands-on Approach, David B. Kirk & Wen-mei W. Hwu (required); ISBN: 978-0-12-381472-2

### Grading Scheme

40%	Projects (5*)
20%	Major Project*
20%	Tests (2)
20%	Final Exam

### Projects

All assigned projects will be submitted via the course's Sakai Drop Box, and they are due at 12:00 pm EST on the day that it is due. *Discussing* your design and implementation with others is encouraged, but each student must turn in their own individual work and is responsible for its contents. No late work will be accepted.

### Academic Misconduct

Any form of academic misconduct, as specified in the Honor Code at Wake Forest University and described in the Student Handbook will be reported to the Judicial Council and the Dean of Colleges for appropriate action.

Assignments in Computer Science courses may be specified as "pledged work" assignments by the professor of the course. When an assignment is specified as "pledged work" the only aid that the student may seek is from either the course professor or an assistant that the professor has explicitly specified. On "pledged work" assignments the student may not use the services of a tutor.

**Disability Notice**

If you have a disability that may require an accommodation for taking this course, then please contact the Learning Assistance Center (758-5929) within the first two weeks of the semester.

<b>Dates</b>	<b>Topic</b>	<b>Reading</b>
	<b>GPU Background and CUDA Programming Model</b>	<b>Chapter 1-3</b>
	<b>Multidimensional Thread Structure</b>	<b>Chapter 4</b>
	<b>Memory Structure</b>	<b>Chapter 5</b>
<b>10/17</b>	<b>Test 1 Chapters 1-5</b>	
	<b>Parallel Programming</b>	<b>Chapter 9,10</b>
	<b>Thread Cooperation</b>	<b>Chapter 6</b>
<b>11/30</b>	<b>Test 2 Chapters 6,9,10</b>	
	<b>Multi-Stream Programming</b>	<b>Chapter 7</b>
	<b>Multi-GPU Programming</b>	<b>Chapter 9</b>
<b>12/14 @ 9:00a</b>	<b>Comprehensive Final Exam NOTE SPECIAL DATE AND TIME</b>	