	Carnegie Mellon	MIT	Rice University	Stanford University	University of Illinois	Harvard University	Virginia Tech	Colombia University	Rochester Institute of Technology (RIT)	Colorado School of Mines	Purdue University	Georgia Institute of Technology	University of California, Berkeley	Stony Brook University
Grading	Homework (4): 40% Exams (2): 30% Final Project: 25% Participation: 5%	Homework (4): 40% Final Project: 55%	Homework: 95% Participation: 5%	Exam: 20% Labs: 30% Final Project: 50%	Exam: 20% Labs: 30% Final Project: 50%	Homework (6): 50% Exam: 15% Final Project: 25% Participation: 10%	Homework: 25% Participation: 5% Final paper: 25% Final project: 45%	Homework: 30% Midterm Exam: 20% Final Exam: 20% Final Project: 30%	Midterm Exam: 12% Final Exam: 24% Final Projects: 64%	Missing Information	Homework & Final Project: 50% Midterm Exam: 20% Final exam: 30%	Homework: 45% Participation: 5% Final project: 50%	Homework: 30% Final Project: 40% Quizes: 30%	Homework: 25% Exams: 30% Final Project: 40% Participation: 5%
Books / Readings	Required book	Hand-outs	Required book	Required book	Required book	Recommended textbooks (6)	Recommended textbooks (2)	Hand-outs	Required book	Hand-outs	Hand-outs	Hand-outs	Hand-outs	Recommended textbooks (2)
Programming Environments	ISPC, OpenCL, OpenMP, MPI	MPI, Star-P for parallel Python and parallel matlab, Julia programming language (Very high performance)	OpenMP, MPI, CUDA	CUDA	CUDA	MPI, ZeroMQ, CUDA, MapReduce	CUDA	MapReduce, X10	CUDA	Not sure	POSIX threads, OpenMP, MPI	Not sure	CUDA	MapReduce
Pre-req: Courses	Data structures, Computer architecture	Linear Algebra, Data structures	Data structures, Computer architecture, Principles of program design/Intro to program design	Data structures, Programming principles, Computer Systems Organization	Data structures, Programming principles, Computer Systems Organization	Data structures, Computer architecture	Linear Algebra, Vector Geometry, Data structures	Data structures	Data structures, Discrete structures, Operating system concepts	Basic math, Intro to Computer Science	Data Structers	Not sure	Data structures, Computer architecture, Principles of program design/Intro to program design	Data structures, Computer architecture highly recommended
Pre-req: Languages	C/C++	Programming abilities	A knowledge of programming in C and/or Fortran	Programming abilities	Programming abilities	Considerable programming experience	Programming abilities	Java	Java	Whichever they are comfortable with	Programming abilities	Not sure	A knowledge of programming in C and/or Fortran	C/C++
Main Emphasis	Covers a wide range of parallel programming topics	A lot of linear algebra, mathematical approach	Programming Parallel Programs, all about the actual practical programming part	The aim of this course is to provide students with knowledge and hands-on experience in developing applications software for processors with massively parallel computing resources	The aim of this course is to provide students with knowledge and hands-on experience in developing applications software for processors with massively parallel computing resources	Theoretical & Practical. Cloud computing. A lot of everything.	The entire course focuses on GPU entirely (named "Parallel Computing and Visualization on GPU").	Use X10 a lot. Main part of the course is implementing a challenge program on a cluster of multi-core processors; to be done throughout the semester	Theoretical & Practical	Simplify Parallel Computing for non-cs majors, solving scientific problems using parallel techniques	Emerging trends in the use of large scale computing platforms, in addition to practical parallel programming	Very Practical: expectation that students will understand parallel computing systems and be able to design algorithms and implement programs for such system.	Very theoretical: performance analysis and tuning, data and task parallelism, synchronization techniques, shared data structures, and load balancing etc...	State of the art shared memory and distributed memory, theoretical & practical