Instructor :

Prof. Thomas Sterling

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Johnston Hall Room 320

(225) 578-8982 (CCT Office)

Office Hours: Tuesday 1:40 – 3:00 PM and Thursday 9:00 –10:00 AM

Assisting Faculty :

Dr. Hartmut Kaiser

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Johnston Hall Room 315

TA :

Daniel Kogler

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Office Hours: Tuesday   1:40 – 3:00 PM

              Thursday   9:00 – 10:00 AM

Johnston Hall Room 318

Course Secretary:

Terrie Bordelon

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Johnston Hall Room 302, (225) 578-5979

Course Logistics:

LOCATION: 202 Coates Hall, Tuesday, Thursday 10:40 – 12:00

Mailing Lists:

All important course announcements such as assignment updates, projects, etc. will be done via the course mailing list csc7600@cct.lsu.edu.

By default your LSU email ID will be used for the Mailing list.

Students are strongly encouraged to utilize this mailing list to facilitate greater interaction and quick resolution of problems.

Course Website:

http://www.cct.lsu.edu/csc7600

Reading Source Materials:

Lecture notes (slides), required reading lists (URLs) provided at the end of lectures, some additional notes (on web site), and assignments would be primary sources of material for exams. There is no required textbook for this course.

Assignments:

There will be adequately portioned assignments during this course.

- Assignments should be turned in as PRINTOUTS to the TA the following TUESDAY BEFORE CLASS.

- Assignments should be turned in WORD format / PDF format. NO handwritten assignments will be accepted.
- Assignments involving programming problems should have source code printed and attached and all solution relevant materials (e.g. PBS scripts, Commands used for performance measurement etc…) must be well documented and attached.
- Source code and all relevant files for assignments involving programming assignments needs to be submitted according to the guidelines mentioned in each problem-set and are due the same time as the assignment. (Late policy for source code submissions is the same as that of assignments)

LATE POLICY:

- All assignments should be turned in on the due date BEFORE CLASS.
- Assignments turned in on the same day by 5 PM (Central) will incur a penalty of 30% of the assignment grade.
- Assignments turned in BEYOND 5PM (Central) of the due date will receive 0 points irrespective of the work quality.

Quizzes:

There will be quizzes every Thursday, which will cover the previous two lectures material for testing purposes. Please see the grading scale for details.

Projects:

Term projects are required for Graduate Students. Details will be provided in the introductory lecture (for those who missed the first class, please check slides in lecture 1 for more details).

LATE POLICY:

- Abstracts turned in later than the assigned date will incur a overall project penalty of 5%
- Walkthroughs done later than the assigned date will incur a overall project penalty of 15%
- Projects turned in later than the assigned date will NOT be considered for grading and will have an automatic score of 0.

Recitation Sessions:

We will hold recitation sections to help revise and discuss various lectures, as and when necessary. Specific logistics for this session will be decided based on student feedback regarding a suitable time.

Plagiarism Policy:

Plagiarism will not be tolerated and will be dealt with in accordance with and as outlined by the LSU Code of Student Conduct : **http://appl003.lsu.edu/slas/dos.nsf/$Content/Code+of+Conduct?OpenDocument**

The LSU *Code of Student Conduct* defines plagiarism in Section 5.1.16

Grading Scheme:

Graduate Students	Undergraduate Students
Midterm – 20 %	Midterm –30 %
Final – 30 %	Final – 35 %
Problem Sets – 25 %	Problem Sets – 30 %
Quizzes – 5 %	Quizzes – 5%
Project – 20 %	

Course Schedule:

			SEGMENT 1
January	Tu	18	Introduction
	Th	20	Parallel Computer Architecture, *Quiz1*
	Tu	25	Commodity Cluster
	Th	27	Benchmarking, *Quiz2*
February	Tu	1	Throughput Computing
			SEGMENT 2
	Th	3	CSP / Parallelism, *Quiz3*
	Tu	8	MPI 1
	Th	10	MPI 2 / Performance Measurement (TAU), *Quiz4*
	Tu	15	Shared Memory / Parallelization, *Sample Project Overview*
			SEGMENT 3
	Th	17	Enabling Technologies -(memory, architecture, multicore, cache coherence) , *Quiz5*
	Tu	22	Pthreads
	Th	24	OpenMP *, Quiz6*
March	Tu	1	Performance Measurement (PAPI…)
	Th	3	Visualization, *Quiz7*, **Project Abstract Due**
	Tu	8	*Mardi Gras Holidays*
	Th	10	Parallel Algorithms 1, *Quiz8*
	Tu	*15*	**MIDTERM EXAM**
			SEGMENT 4
	Th	17	Parallel Algorithms 2, *Quiz9*
	Tu	22	Parallel Algorithms 3, *Project Walkthroughs**
	Th	24	Parallel Algorithms 4, *Project Walkthroughs*, Quiz10*
	Tu	29	Libraries 1
	Th	31	Libraries 2, *Quiz11*
April	Tu	5	Parallel File I/O 1
	Th	7	Parallel File I/O 2, *Quiz12*
	Tu	12	Operating Systems 1
	Th	14	Operating Systems 2, *Quiz13*
			SEGMENT 5
	Tu	*19*	*Spring Break*
	Th	*21*	*Spring Break*
	Tu	26	Scheduling / Workload Management Systems
	Th	28	*Checkpointing/System Administration*, **Project Due**, *Quiz14*
May	Tu	3	Beyond and Beyond
	Th	5	Class Summary / Final Exam Review
	Th	*12*	**FINAL EXAM (7:30 – 9:30 AM)**

*Project walkthroughs will be held during office hours.