

Iowa High Performance Computing Summer School 2011

Schedule of Lectures and Activities

Dates: June 1–3, 2011
 Location: 2523 UCC Training Room
 Faculty: Professor Gregory Howes University of Iowa
 Professor William Dorland University of Maryland
 Professor Suely Oliveira University of Iowa
 Professor Christian Ott California Institute of Technology

Wednesday, 6/1		
Time	Course	Lecturer
8:15–9:00am	Arrival and Getting Online	All Faculty
9:00–9:30am	Welcome and Introductions	
9:30–11:00am	Introduction to High Performance Computing	Howes
11:00–11:15am	Break	
11:15–12:15am	MPI Programming	Dorland
12:15–1:30pm	Lunch	
1:30–3:00pm	Hands-on Exercises	
3:00–4:00pm	Introduction to Parallel Hydrodynamics Code HYDRO	Howes
4:00–5:00pm	Hands-on Exercises	
Thursday, 6/2		
Time	Course	Lecturer
9:00–10:30am	Multi-threading and OpenMP	Ott
10:30–12:00pm	Hands-on Exercises	
12:00–1:30pm	Lunch	
1:30–3:00pm	GPU Computing and CUDA Programming	Oliveira
3:00–4:30pm	Hands-on Exercises	
4:30–5:00pm	Discussion of Summer Computing Project	All Faculty
Friday, 6/3		
Time	Course	Lecturer
9:00–10:30am	Parallel Performance and Optimization	Howes
10:30–12:00pm	Hands-on Exercises	
12:00–1:30pm	Lunch	
1:30–3:00pm	The Practice of High Performance Computing	Howes
3:00–4:00pm	Hands-on Exercises	
4:00–4:30pm	Evaluations, Questions, and Concluding Remarks	All Faculty