

Iowa High Performance Computing Summer School 2015

Schedule of Lectures and Activities

Dates: June 1–3, 2015
 Location: 2523 UCC Training Room
 Faculty: Professor Gregory Howes University of Iowa
 Professor Hans Johnson University of Iowa
 Professor Michael Schnieders University of Iowa

Monday, 6/1		
Time	Course	Lecturer
8:15–9:00am	Arrival and Getting Online	All Faculty Howes Howes Howes Howes Howes
9:00–9:30am	Welcome and Introductions	
9:30–10:15am	Introduction to High Performance Computing	
10:15–10:30am	Break	
10:30–12:15am	MPI Programming and Hands-on Exercises	
12:15–1:30pm	Lunch	
1:30–2:45pm	MPI Programming and Hands-on Exercises (continued)	
2:45–3:30pm	Design of Parallel Algorithms	
3:30–4:00pm	Introduction to Parallel Hydrodynamics Code HYDRO	
4:00–5:00pm	Hands-on Exercises	
Tuesday, 6/2		
Time	Course	Lecturer
9:00–10:30am	Multi-threading, OpenMP, and Thread Building Blocks	Johnson
10:30–12:00pm	Hands-on Exercises	
12:00–1:30pm	Lunch	Schnieders
1:30–3:00pm	GPU Computing and CUDA Programming	
3:00–5:00pm	Hands-on Exercises	
Wednesday, 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	Howes
1:30–2:30pm	The Practice of High Performance Computing	
2:30–4:00pm	Hands-on Exercises	
4:00–4:30pm	Evaluations, Questions, and Concluding Remarks	All Faculty