Renaissance Computing

An Initiative for Promoting Student Participation in Computing

- **GOAL** Project goal is to develop, plan, and study Renaissance Computing at UNL
- A radical re-thinking and revitalization of our core curriculum in computer science *and* the role of computer science at the university level
- To inculcate "computational thinking" into general education on campus
- To contextualize computer science education with today's interdisciplinary applications and challenges to improve participation and retention
- To promote the use of computer-aided education tools to facilitate better access to materials and learning environment

Renaissance Computing Curriculum Planning (RC-CP) Workshop



AIMS

PARTICIPATING ACADEMIC UNITS

- lacksquare

Intellectual Basis

Renaissance Computing Benefits CS Majors

Renaissance Computing Benefits Other Disciplines

CSCL Learning Yields Better Student Learning



Faculty

Dr. Leen-Kiat Soh Dr. Ashok Samal Dr. Stephen Scott Dr. George Meyer

Year 1: Planning and Development Phase

Develop CS1 courses (e.g. CS1 Humanities and CS1 Sciences) for pilot study

Deploy SCORM-compliant Learning Objects

Year 2: Pilot Study Phase

Students recruited from CS, Biological Sciences, History and English Dept

Data collected on student outcomes and technical aspects of course implementation

• To create introductory courses for CS major and minors with contexts in sciences, humanities, engineering, arts • To develop interdisciplinary pathways to computing • To incorporate computer-supported collaborative learning and online learning objects

Department of Computer Science and Engineering Department of English Department of History • School of Music College of Agricultural Sciences and Natural Resources College of Education and Human Sciences

Dr. William G. Thomas

Students

Dr. Stephen Ramsay Dr. Brian Moore Dr. Duane Shell Dr. Etsuko Moriyma

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