Administrative Unit: Computer and Mathematical Sciences Department

Course Prefix and Number: CISS 494

Course Title: Senior Seminar in Computer Science

Number of: Credit Hours: 3  Lecture Hours: 3  Laboratory Hours: 0

Catalog Description: Culminating experience course required for Computer Science majors. Requires original research project, paper, and presentation under the supervision of a computer science faculty member. Grade of C or higher required. The course includes a program evaluation component. Prerequisites: CISS 325 (or CISS 320), CISS 350, CISS 430, and senior standing.

Prerequisite(s)/Corequisite(s): CISS 325 (or CISS 320), CISS 350, CISS 430, and senior standing.

Text(s): None.

Course Objectives:
• To synthesize knowledge from core computer science courses required to support a term-long research project.
• To acquire and apply research and writing skills appropriate to the field of computer science.

Measurable Learning Outcomes:
• Understand how to conduct effective literature searches and create bibliographies pertinent to the current state of research in an area of computer science.
• Understand how to identify a research direction within an area of computer science and write a preliminary research proposal which includes papers to be studied, a list of resources required for the project, and a timeline for the progress of the project.
• Conduct research using critical thinking skills and the synthesis of knowledge acquired from other courses.
• Write effectively through the completion of a research paper of no less than 20 pages in length.
• Speak effectively and professionally by presenting their research orally to a group of their peers.
• Critically analyze and intelligently discuss current literature in the field.

Topical Outline (major areas of coverage): The Major Field Test in Computer Science will be administered and students will:

• Conduct a literature search and create bibliography identifying the current state of research in a field of interest.
• Write a research proposal identifying topic to be studied, papers to be read, resources needed, and timeline.
• Perform the work outlined in the research proposal and write the paper.
• Orally present the research paper.

Recommended maximum class size for this course:  10

Library Resources: Online databases are available at http://www.ccis.edu/offices/library/resources.asp. You may access them from off-campus using your eServices login and password when prompted.

Prepared by:   Suzanne Tourville

Date:  February 14, 2005

NOTE: The intention of the master syllabus is to provide an outline of the contents of this course, as specified by the faculty of Columbia College, regardless of who teaches the course, when it is taught or where it is taught. Faculty members teaching this course for Columbia College are expected to facilitate learning pursuant to the course objectives and cover the subjects listed in the topical outline. However, instructors are also encouraged to cover additional topics of interest so long as those topics are relevant to the course’s subject. The master syllabus is, therefore, prescriptive in nature but also allows for a diversity of individual approaches to course material.

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