

**William Paterson University of New Jersey**  
**Department of Computer Science**  
**College of Science and Health**  
**Course Outline**

1. TITLE OF COURSE AND COURSE NUMBER: Senior Project; CS 490 Credits:3
2. DESCRIPTION OF THE COURSE: This course provides qualified students an opportunity to work with faculty members in research and development projects in areas of current interest in Computer Science. Students are expected to carry out a meaningful project to be reviewed and approved by a panel of advisors.
3. COURSE PREREQUISITES: Senior standing with a GPA of 3.5 or better and the approval of the Curriculum Committee.
4. COURSE OBJECTIVES:  
  
To provide a mechanism for students to gain research experience in Computer Science.
5. STUDENT LEARNING OUTCOMES:  
  
Upon completion of the course, students will be able to:
  - a) Demonstrate research skills. Measure: exams, assignments, and projects.
  - b) Demonstrate communication skills and team works crucial in professional software/hardware development environment.
6. TOPICAL OUTLINE OF THE COURSE CONTENT:  
  
No standard contents.
7. GUIDELINES/SUGGESTIONS FOR TEACHING METHODS AND STUDENT LEARNING ACTIVITIES:  
  
The student will work closely with one or more faculty members and at least one faculty member must be from the Computer Science Department at WPC. This widens the opportunity for students to work with faculty members in other colleges such as NJIT or work with faculty members in other departments on inter-disciplinary projects such as biological/artificial neural networks.  
  
In addition to attending internal colloquia, seminars, and workshops, students may be requested by faculty advisors to participate external project related activities and to present progress reports in both written and oral forms.
8. GUIDELINES/SUGGESTIONS FOR METHODS OF STUDENT ASSESSMENT (STUDENT LEARNING OUTCOMES):  
  
To insure the quality of the program, a Faculty Panel with a minimum of three members will be appointed by the Curriculum and Planning Committee of the Department to assess the outcome of the project. Student is expected to submit a written report or paper to the Panel and to give an oral presentation open to the public at the conclusion of the project.
9. SUGGESTED READINGS, TEXTS, OBJECTS OF STUDY:  
  
No standard textbooks. Readings related to the specific research may appear in the proposals.
10. BIBLIOGRAPHY OF SUPPORTIVE TEXTS AND OTHER MATERIALS:  
  
Not applicable.

11. PREPARER'S NAME AND DATE: Dr. Erh-Wen Hu and John Najarian
12. ORIGINAL DEPARTMENTAL APPROVAL DATE: Spring 1997
13. REVISOR'S NAME AND DATE: Dr. Erh Wen Hu and John Najarian on Spring, 2005  
and previously Spring, 2000.
14. DEPARTMENTAL REVISION APPROVAL DATE: Spring, 2005