

UNIVERSITY OF WYOMING

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Date: March 28, 2005

To: Dean Gus Plumb
Engineering Dept Heads
Dean Oliver Walter
Sivaguru Sritharan, Math
Dean Roddick, Chemistry
Susan Frye, English
Rollin Abernethy, Academic Affairs

Re: Updated results of Engineering's Power Groups

Attached please find a packet of information that describes the assessment that we have been doing for the past 10 years for the Engineering Power Groups.

- The first page gives details on the number of students involved and the results of each fall semester. You will note that we have continued to include Power Groups for students who only qualified to take MATH 1450 (instead of MATH 2200).
- The associated graphs are split into two sections – one dealing with the Calculus-based Power Groups and one dealing with the Algebra & Trig-Based Power Groups.
 - Calculus-Based Power Groups
 - Three comparative graphs show various academic measures that we use to determine success or failure (Semester GPA, Semester Hours Earned, and Fall to Spring Retention within Engineering) as a function of time. The Power Group students have consistently performed higher on these measures than the non-Power Group students. For Fall 2004, the GPA for the Power Group students was slightly below that for the non-Power Group Students.
 - The next graph shows the Fall 2004 grades in the various Power Group classes (MATH 2200, ES 1060, CHEM 1020/1050, ENGL 1010, ES 1000, COSC 1030, and COSC 1010) for the Calculus-based Power Groups compared to non-Power Group students.
 - The last three graphs show the 10-year average of each of the three success measures for various constituent groups (male, female, minority students, majority students). You will note that the Power Group concept has been very successful for minority students.
 - Algebra & Trig-Based Power Groups
 - Three comparative graphs show various academic measures that we use to determine success or failure (Semester GPA, Semester Hours Earned, and Fall to Spring Retention within Engineering) as a function of time.
 - For the second consecutive year, the non-Power Group students have outperformed the Power Group students (at least with regard to the fall semester GPA). In fact, I'm concerned that the fall semester GPA for the Power Group students was less than 2.00.
 - The next graph shows the Fall 2003 grades in the various Power Group classes (MATH 1450, CHEM 1020/1050, ENGL 1010, ES 1000, ECON 1200, and COSC 1010) for the Algebra & Trig-based Power Groups compared to the non-Power Group students.
 - It should be noted that the Power Group average for COSC 1010 was based on 4 students and the non-Power Group average represents a single student.

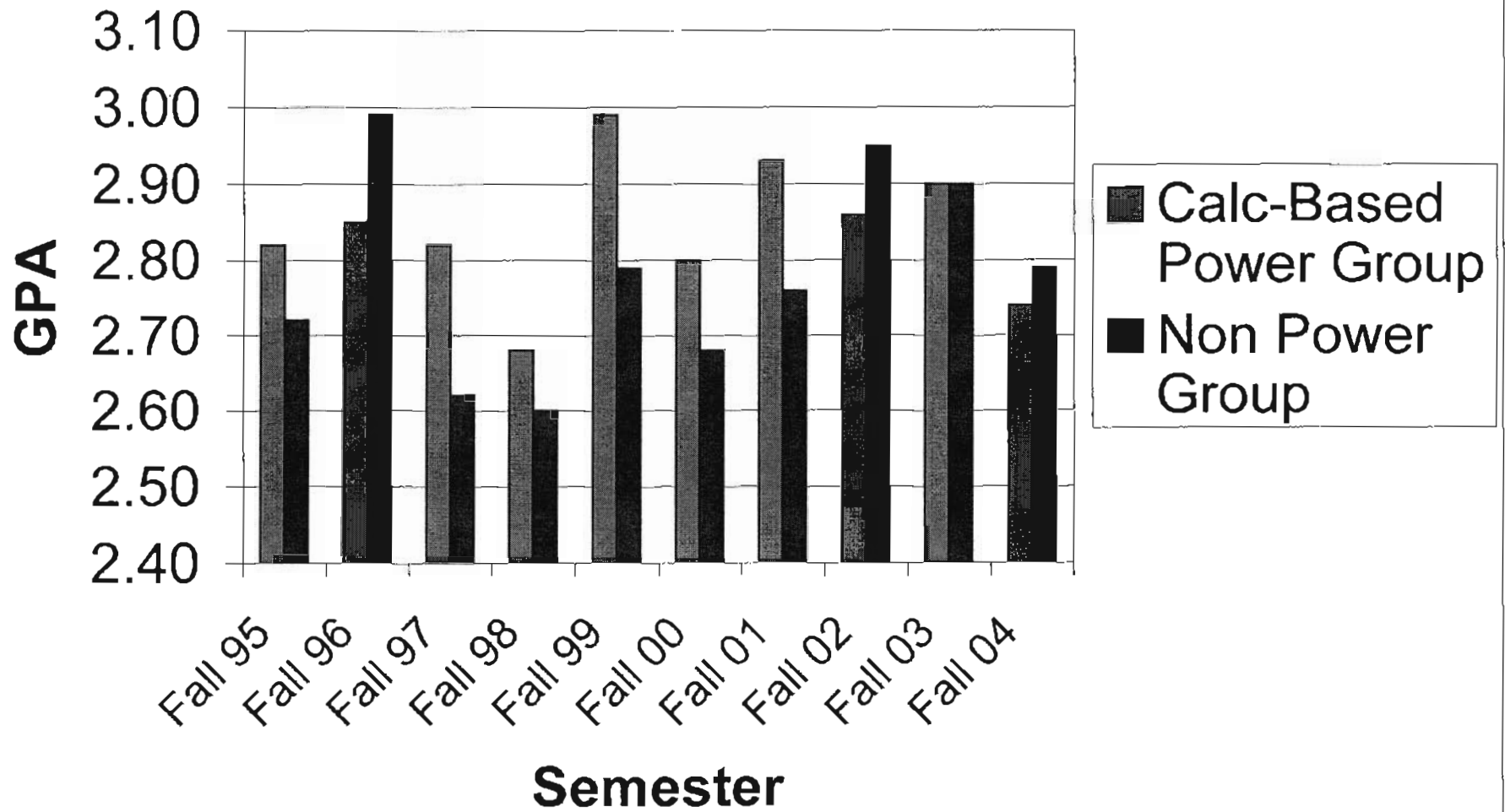
Overall, this project continues to show academic benefits to its participants. Thanks for your continued support of this effort.

cc: Susan McCormack

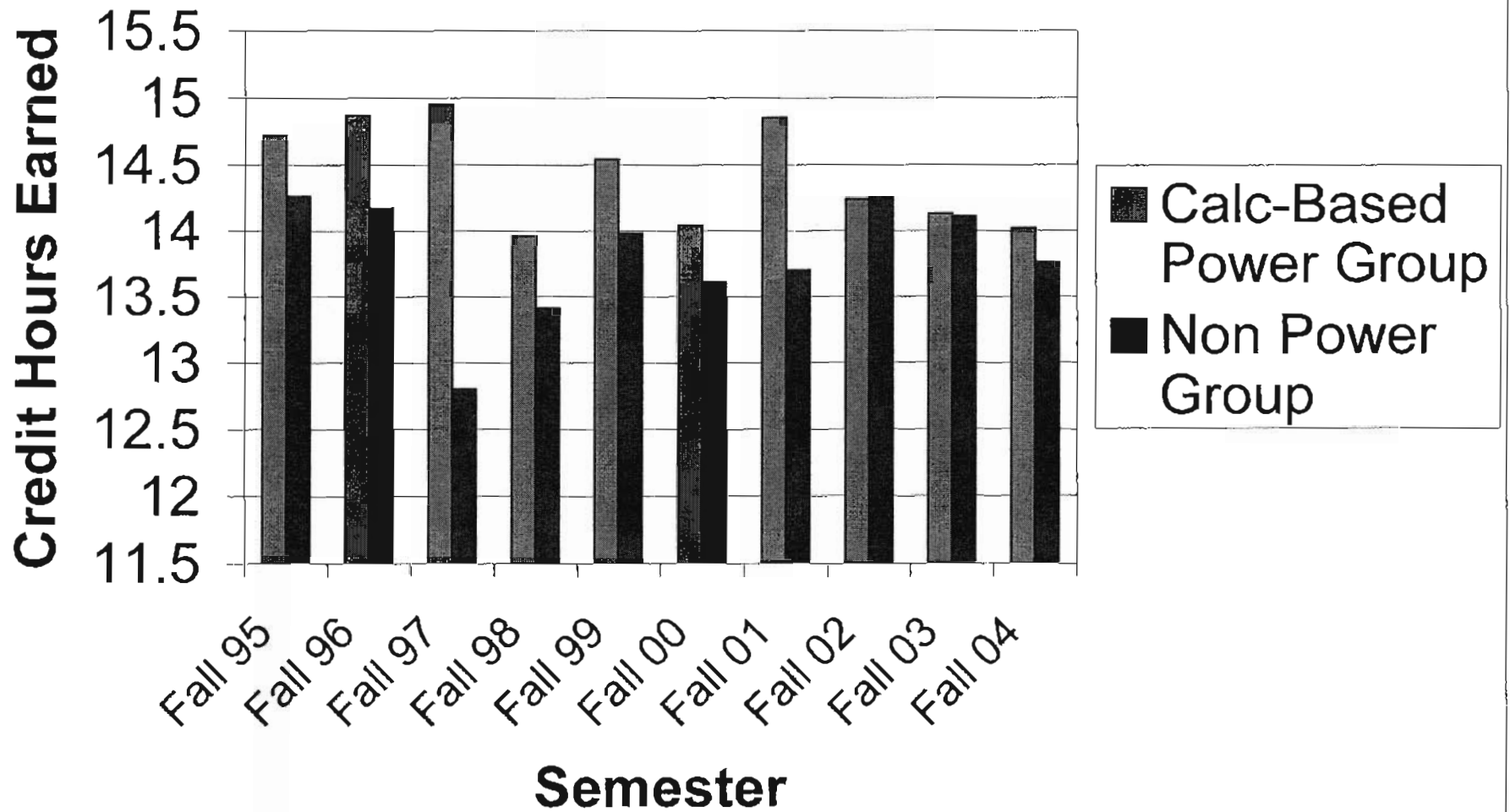
Calculus-Based

Power Groups

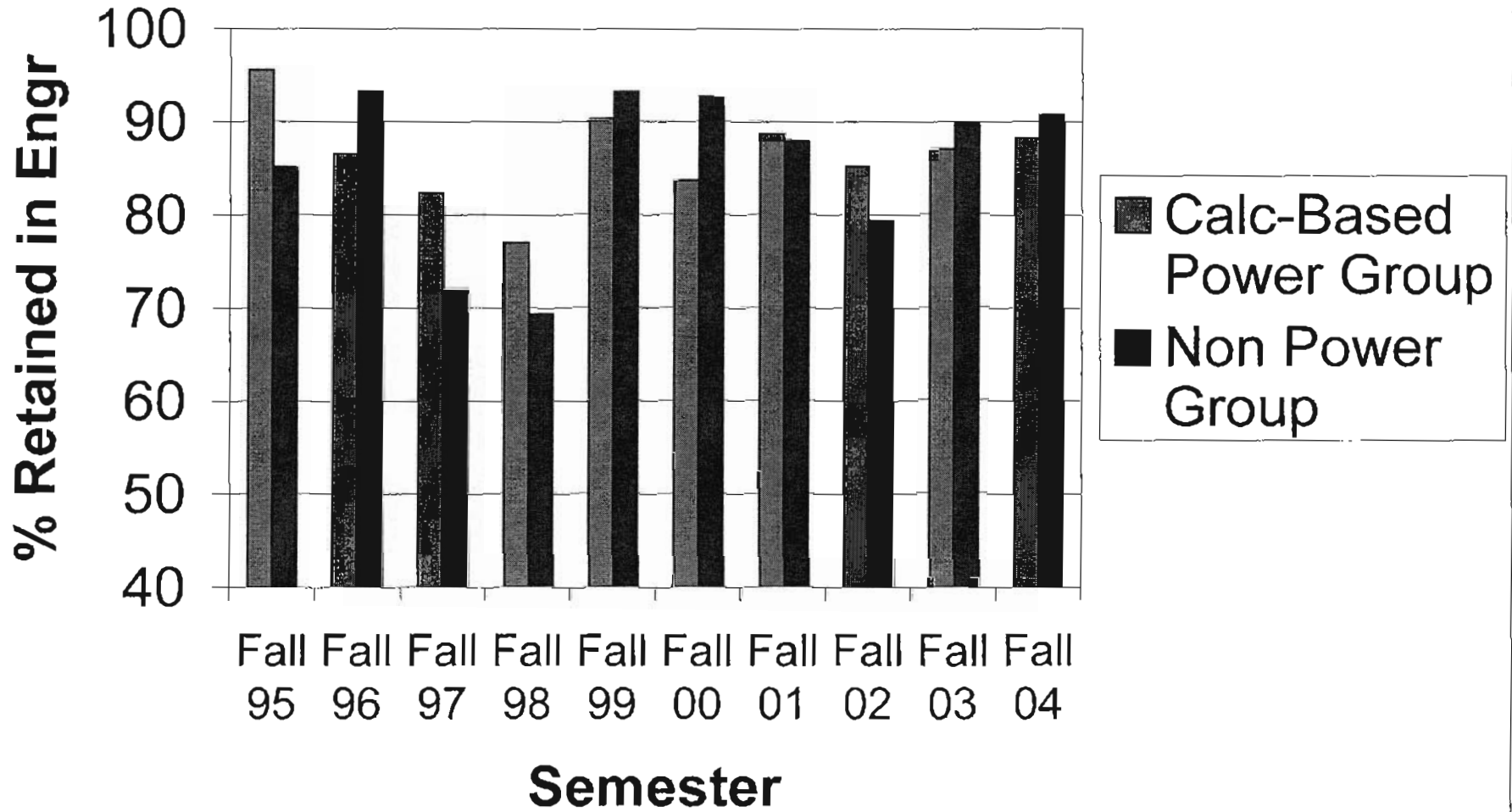
Fall Sem GPA



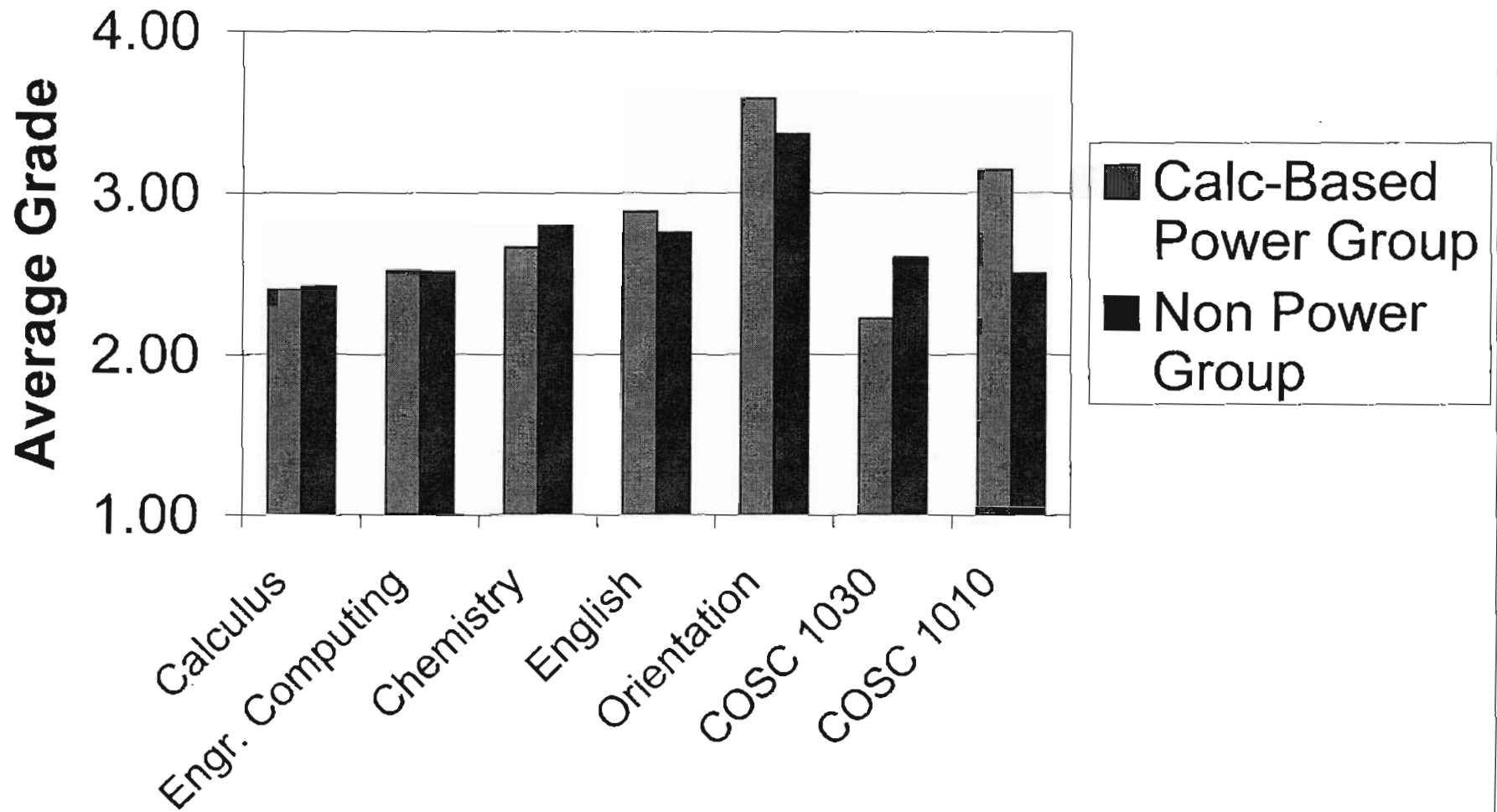
Fall Sem Hours Earned



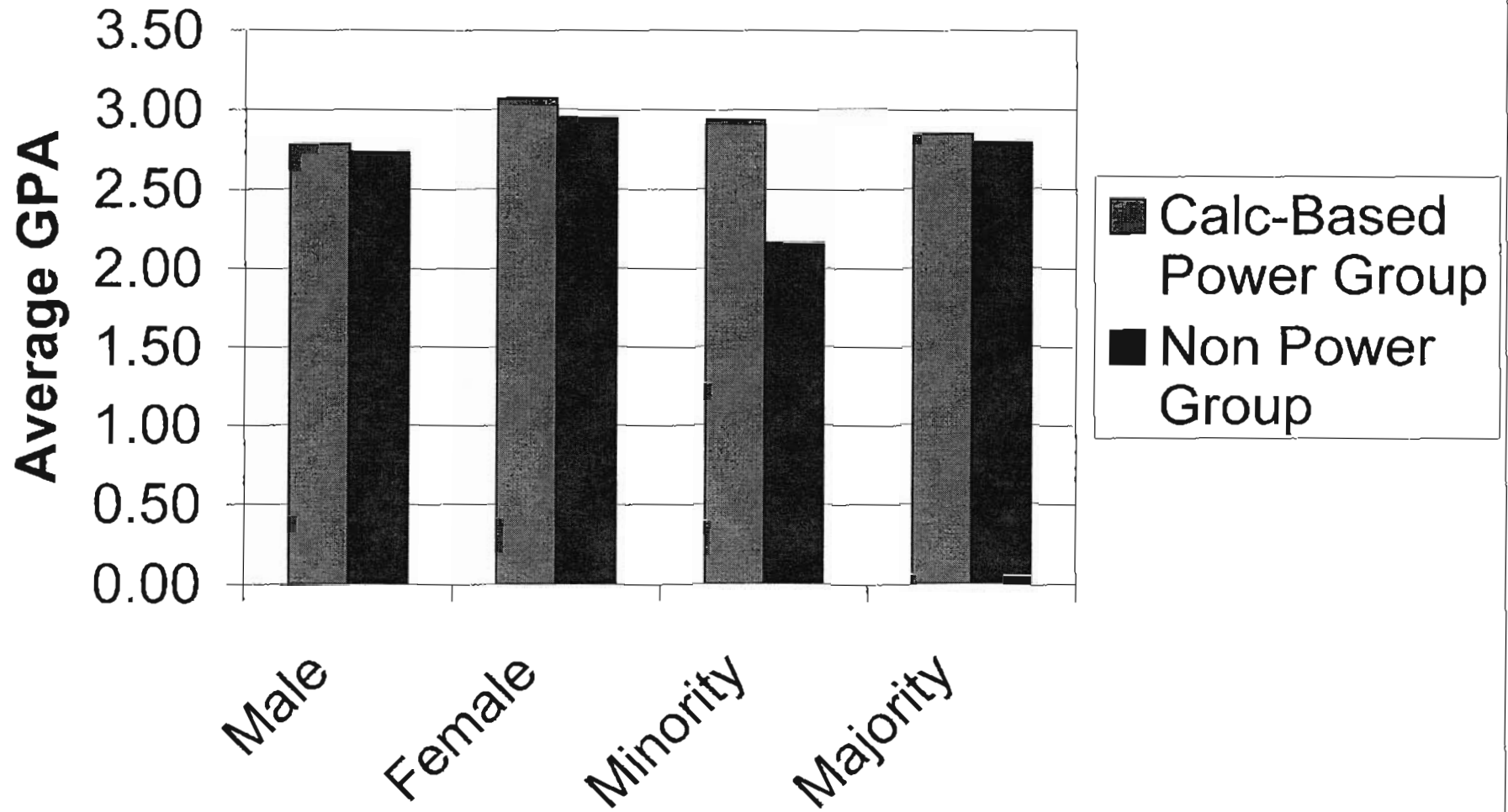
Fall to Spring Retention



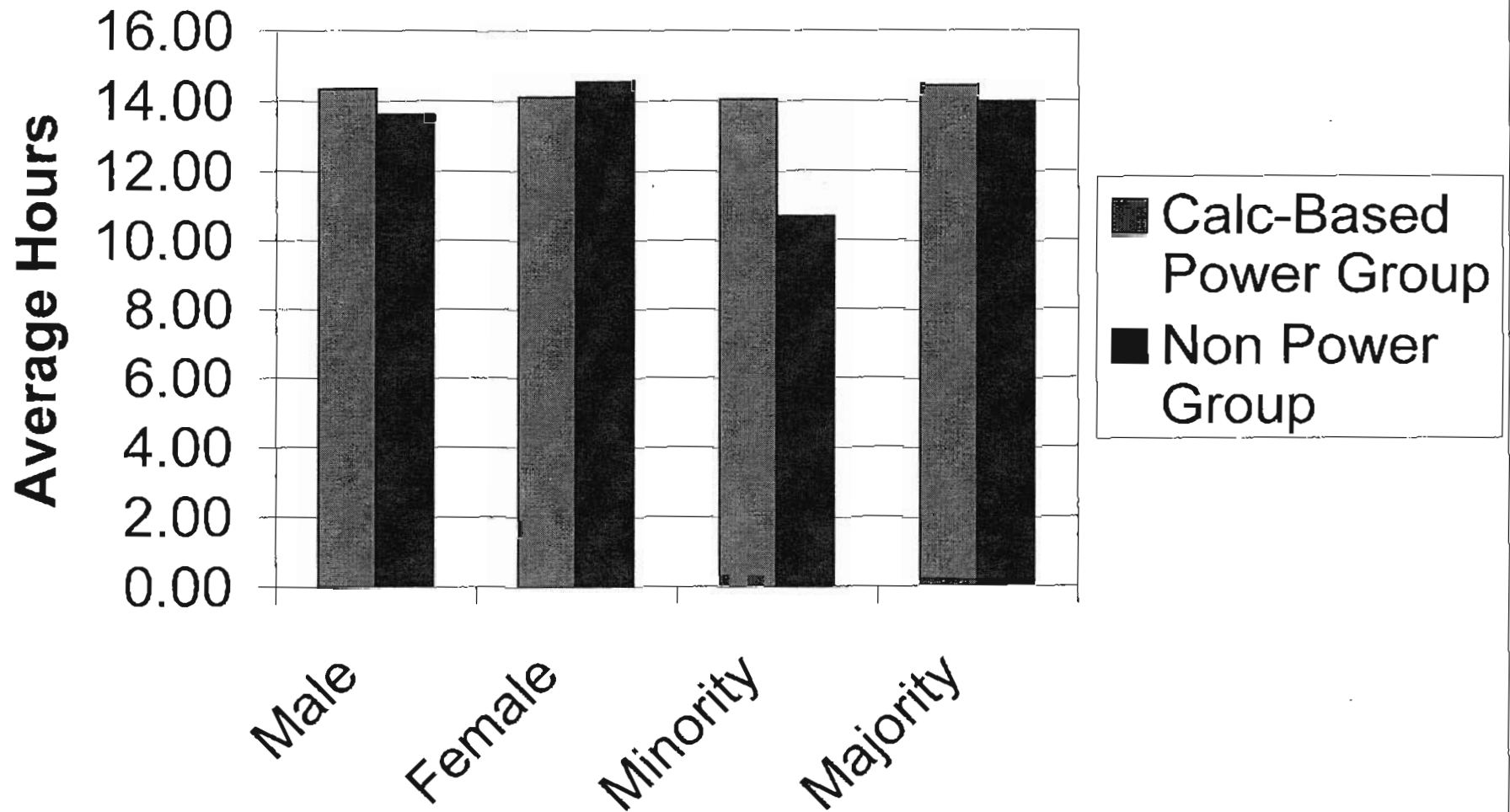
Fall 2004 Grades



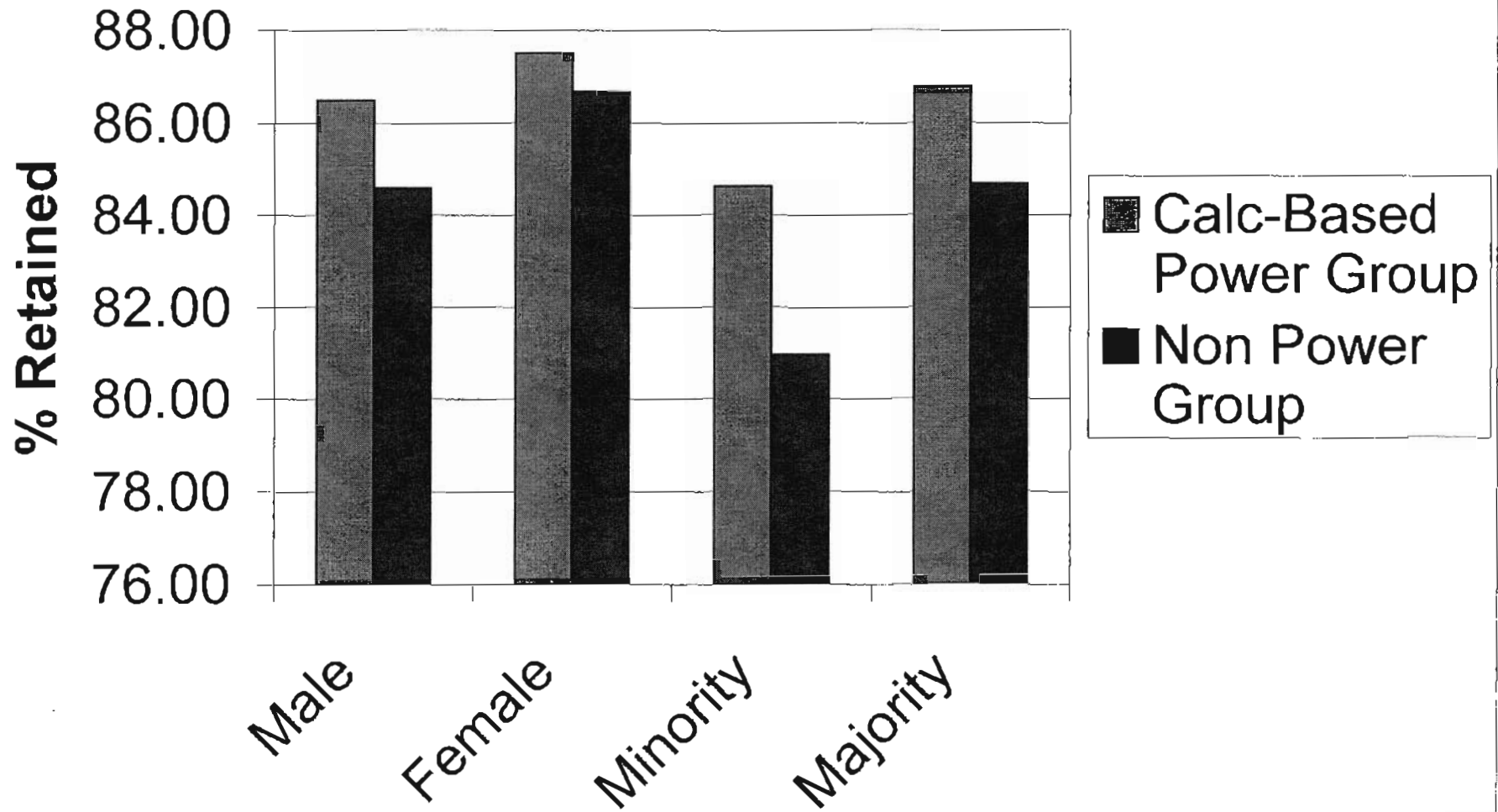
Fall Semester GPA (1995-2004)



Fall Sem Hours Earned (1995-2004)



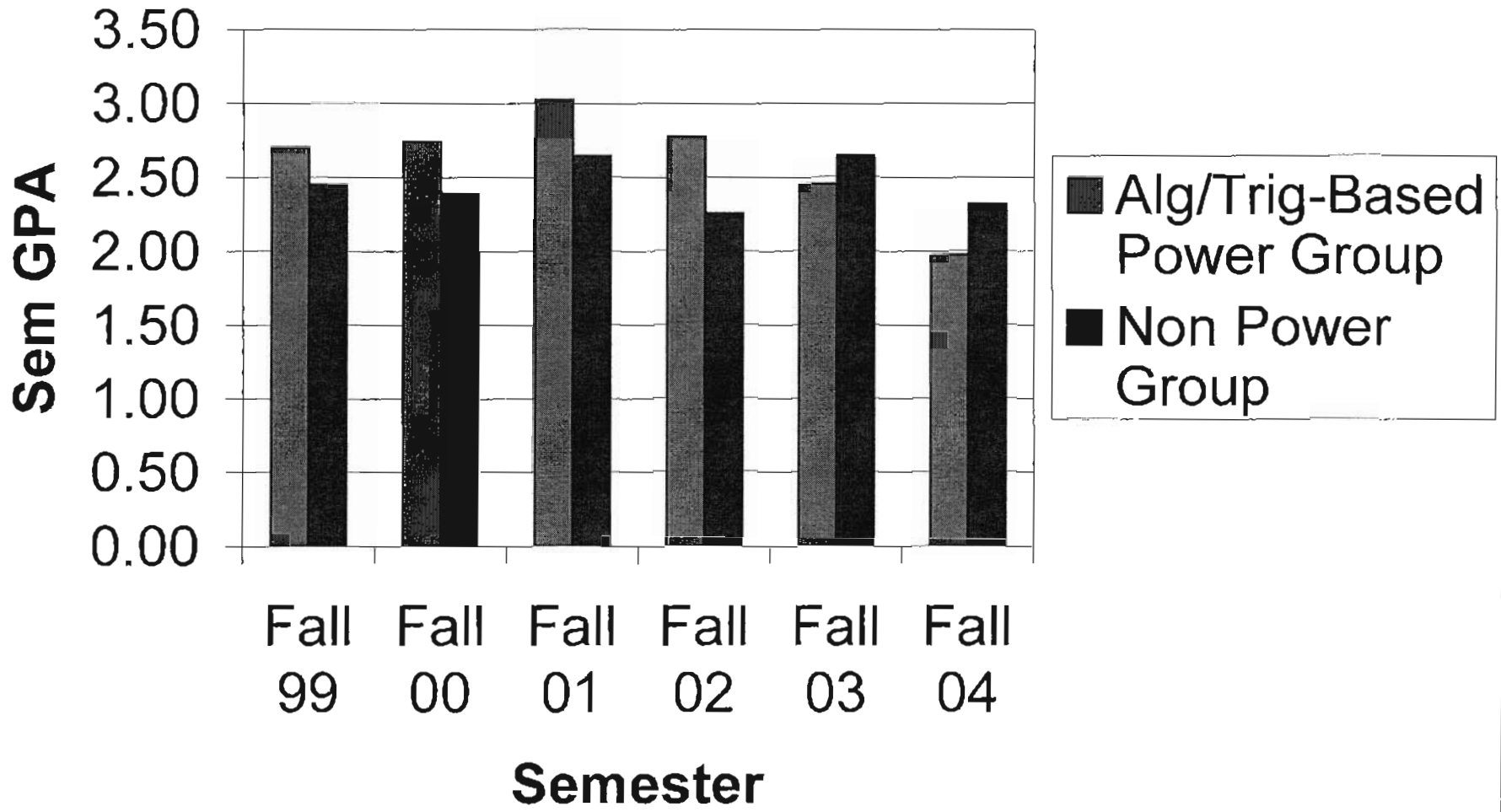
Fall to Spring Retention (1995-2004)



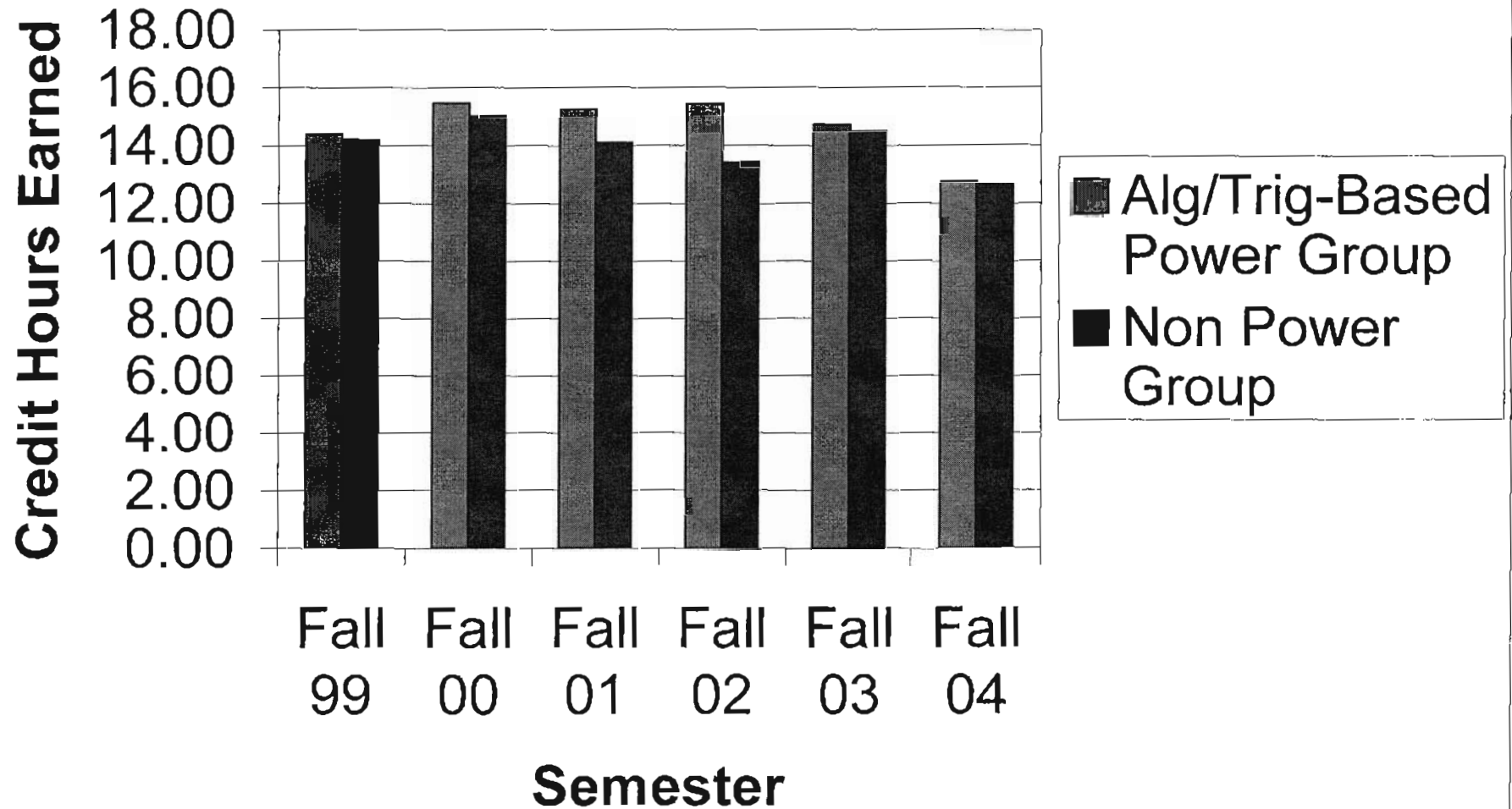
Algebra/Trig-Based

Power Groups

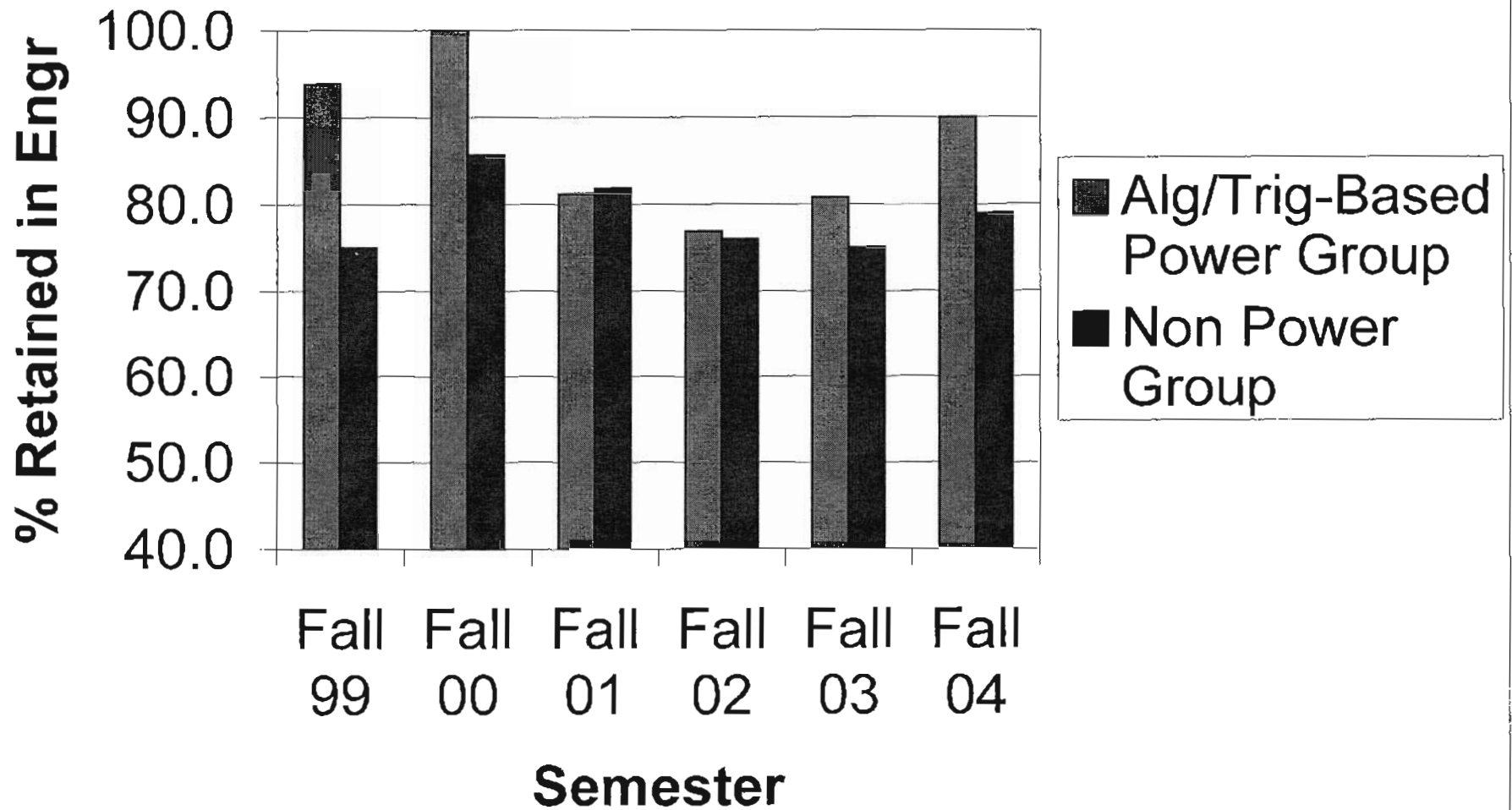
Fall Semester GPA



Fall Sem Hours Earned



Fall to Spring Retention



Fall 2004 Grades

