

## LAPTOP USE - PHYSICS 218 - RESULTS

Eight students filled out a survey during the week of February 6 through February 12, 2007 and again during the week of April 24 to April 30 to report on their use and attitudes towards laptops at the two time periods. The survey responses are noted below with mean response for February listed first, followed by the April response in bold italics. If the means were found to be statistically significantly different from one another, it is indicated with \*. It should be noted that 3 out of 8 of the students surveyed had a desktop computer and 6 out of 8 had their own laptop.

### Frequency of Laptop Use:

#### *Time 1 vs Time 2 by Use Question*

<b>2.5 vs 3.25</b>	Average number of hours per week that student spent using the laptop <b>in class</b> for class work related to PHYS 218:
<b>7.12 vs. 6.75</b>	Average number of hours per week student spent using the laptop <b>out of class for class assignments for PHYS 218:</b>
<b>2.88 vs. 6.55*</b>	Average number of hours per week student spent using the laptop for <b>other academic work</b> not related to PHYS 218:
<b>31.36 vs. 35.25</b>	Proportion of computing time in the week spent using the PHYS 218 laptop

### Where Laptops were Used:

Averaging across the two weeks that were reported, these are the average number of hours students spent using the computer in other spaces (besides in class for class work for PHYS 218) (mean and standard deviation provided):

#### *Average Hours in a Week Time 1 and 2 by Space*

<b>5.82 (5.01)</b>	living space
<b>2.00 (2.82)</b>	academic building study lounge
<b>.38 (.88)</b>	recreational space
<b>.18 (.53)</b>	computer classroom
<b>1.25 (2.18)</b>	library
<b>1.69 (4.03)</b>	classroom
<b>.18 (.53)</b>	other, please list:

:

*\*statistically significant at  $p < .05$ .*

## Attitudes about Laptops

Students indicated their level of agreement with each statement using this scale:

1	2	3	4	5	6	7
<i>Disagree Strongly</i>			<i>neutral</i>			<i>Agree Strongly</i>

*Time 1 vs Time 2 Average Responses by Question:*

<b>5.12 vs. 4.88</b>	I prefer to be able to use both a laptop and a desktop computer.
<b>5.00 vs. 6.00*</b>	Using a laptop saves me a lot of time since I can use it anywhere.
<b>4.06 vs. 5.25**</b>	I wish I could use the PHYS 218 laptop for recreational purposes.
<b>6.25 vs. 5.56</b>	The laptop screen is of sufficient size.
<b>1.88 vs. 2.12</b>	The laptop is only useful for my Physics class, not for other classes or for entertainment.
<b>5.12 vs. 5.88</b>	Using a laptop makes me more productive since I can use it anywhere.
<b>2.75 vs. 2.87</b>	Keeping the laptop charged is a hassle.
<b>6.12 vs. 6.62*</b>	The laptop is a good learning tool for PHYS 218.
<b>2.25 vs. 2.62</b>	The speed of the laptop is too slow.
<b>2.00 vs. 2.88</b>	I like to do most of my class work in a computer lab rather than .on my laptop
<b>5.88 vs. 5.88</b>	The software programs for PHYS 218 run smoothly on my laptop.
<b>4.50 vs. 5.00</b>	I feel like I can be more creative using a laptop compared to a desktop because I can use it anywhere.
<b>2.43 s. 1.57**</b>	I am tired of carrying around a laptop.
<b>5.25 vs. 4.62</b>	I would like to use a laptop for all of my classes.

*\*statistically significant at  $p < .05$*

*\*\*statistically significant at  $p < .01$*