



## PeopleSoft: Usability Issues of the Student Enrolment Services (SES)

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## Usability Methods

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The following evaluation was done as part of a laboratory for Psychology 425, An Introduction to Human Factors Engineering.

Evaluation methods from usability engineering were used to determine difficulties that students had with the Student Enrolment Services (SES) registration system provided by PeopleSoft and the University of Calgary.

Specifically, heuristic evaluation and usability testing were used to identify most problems and prioritize common issues. Most Fortune 500 companies use usability engineering to improve their products and services.

## Overall Impressions of PeopleSoft SES

Which interface would you prefer to use to register (only those who have used both systems)?

INFOnet—100%

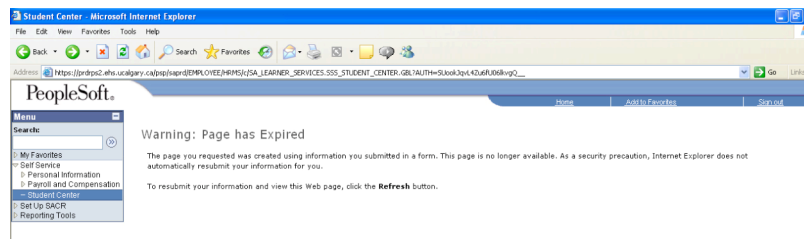
PeopleSoft—0%

How much more time did you spend to register with PeopleSoft, than INFOnet?

Mean = 1/2 to 1 hour

One student said their brother went to U. of Victoria because he could not use PeopleSoft to register at the U. of Calgary.

## SES Usability Problems



1) **The back button** returns the user to a blank screen and previous screens are lost. The net effect causes the student to go back and forth without sufficient navigation support.

## SES Usability Problems

2) **Course number search** is by catalog number not course number. Students relate to course number and not to catalog number. Using search while registering for classes requires multiple unnecessary steps.

The screenshot shows the SES registration interface. At the top, there are buttons for "my class schedule", "class search", "add", "drop", and "swap". Below these is a "go to ..." dropdown menu. The "Add Classes" section is active, showing a step indicator with "1" selected. The text reads: "1. Select classes to add. To select classes for another term, select the term and click Change. When you are satisfied with your class selections, proceed to step 2 of 3." Below this is a yellow error message box with a triangle icon: "The class number entered is not valid for this term. Try another." Underneath the error message is a "Select Term" dropdown menu set to "Fall 2007" with a "change" button. Below that is a section titled "Add a class using one of the following:". It contains two input fields: "Search for Class" with a "Search for Classes" dropdown and a "search" button, and "Enter Class Nbr" with a text input containing "425" and an "enter" button. The "OR" text is between the two input fields.

## SES Usability Problems

3) Wait listing causes conflicts with other classes that are open. It is possible to be wait listed in laboratory, but not in the class, which is confusing.

4) Registering for each semester must be done separately. Trying to register for both at the same time causes a number of system errors. For instance, viewing another semester such as Winter 2008 comes up as Fall 2007. Full year courses are particularly problematic.

## SES Usability Problems

Message	Status
<b>Error:</b> Class % is closed. You are already on the wait list.	✗
<b>Error:</b> Class 19071 is full. If a wait list is available, you may add or swap into an open wait list position. Click the Fix Errors or Swap Another Class button below, re-select the class and proceed to the 'Enrollment Preferences' page. Select the 'Wait list if class is full' option and resubmit your request.	✗

5) **Error messages** are not sufficiently specific.

FIX ERRORS

6) The “Fix Errors” button returns the student to the main schedule page.

## SES Usability Problems

7) Information about why a student can't register when adding a class or after being denied access to it is insufficient. For instance, “you do not have the pre-requisite” would be helpful.

8) To add a class, you can't just click “add class” while searching, instead the class number has to be written out or remembered (not possible).

9) To “swap” a class, you must drop a conflicting course first and you lose your status in a course. Conflicting labs require a solution from Departments.

## SES Usability Problems

10) **Payment** requires writing everything out. No record of payment is generated. A series of tick boxes is presented to the student to confirm or deny particular expenses, which is confusing.

University of Calgary				
Item Description	Due Date	Item Term	Outstanding Charges	Payment Amount
Payment Plan Charges	2007/11/02	Fall 2007	115.00	
Payment Plan Charges	2007/12/03	Fall 2007	115.00	
Payment Plan Charges	2008/01/02	Fall 2007	115.00	
Grad Registration	2008/01/25	Winter 2008	10.00	
* Grad Bursary	2008/01/25	Winter 2008	10.00	
Grad Group Insurance	2008/01/25	Winter 2008	11.00	
Athletics	2008/01/25	Winter 2008	42.50	
Graduate Students' Association	2008/01/25	Winter 2008	83.45	
Campus Recreation	2008/01/25	Winter 2008	92.48	
** Grad Dental Insurance	2008/01/25	Winter 2008	165.00	
Grad U-PASS	2008/01/25	Winter 2008	225.00	
** Grad Health Insurance	2008/01/25	Winter 2008	240.00	
Tuition Fees	2008/01/25	Winter 2008	476.00	
Tuition Fees	2008/05/16	Spring 2008	240.00	
Tuition Fees	2008/07/04	Summer 2008	240.00	
Excess Payments			0.00	
<b>Total</b>			<b>2,180.43</b>	

What I Owe			
Term	Outstanding Charges & Deposits	Pending Payments	Total Due
Fall 2007	345.00		345.00
Winter 2008	1,355.43		1,355.43
Spring 2008	240.00		240.00
Summer 2008	240.00		240.00
<b>Total</b>	<b>2,180.43</b>		<b>2,180.43</b>

Currency used is Canadian Dollars.

[MAKE A PAYMENT](#)

## SES Usability Problems

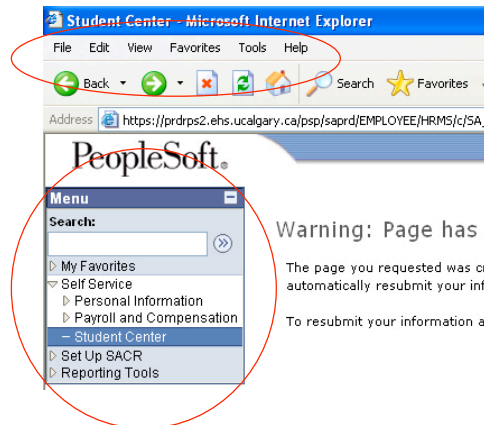
11) **Old material** is not removed. For instance, all previous exam schedules are still available.

### Exam Schedule

Select Term	Fall 2004			change
Class	Fall 2004	Schedule	Location	
PHYS 221-02 (74543)	Fall 2005	5:30 - 8:30	Red Gym	
	Fall 2006		Exam	
MATH 221-17 (73593)	Fall 2007	8:00 - 1:00	Aux Gym	
	Spring 2005		Exam	
MATH 251-02 (73704)	Spring 2006	5:30 - 7:30	ST 148	
	Spring 2007			
PSYC 205-01 (74766)	Winter 2005			
	Winter 2006			
SPAN 203-01 (75287)	Winter 2007			
	Winter 2008			
	Principles Of Psychology (Lecture)	Final	2004/12/21	08:00 - 09:15 MFH 162
	Beginners' Spanish II (Lecture)	Final	2004/12/22	08:00 - 10:00 Red Gym Exam

## SES Usability Problems

12) Poor **navigation support** (e.g., too many open windows, menus not helpful, left bar not helpful).



## SES Usability Problems

	GRST 211-B01 (20404)	TechTermsOfMed &LifeSciences (Laboratory)	TBA	Web- Based Section	Staff		✓
<input type="checkbox"/>	<a href="#">PSYC 411-01 (17708)</a>	Design&AnalysisP sycResearch (Lecture)	MWF 12:00 - 12:50	ST 064	S. Boon	3.00	⚠
	PSYC 411-B01 (17710)	Design&AnalysisP sycResearch (Laboratory)	W 16:00 - 17:50	SS 018	S. Boon, J. Schmidt		⚠

13) When an unfixable problem occurs or the SES is too unusable, the student has to go to the Registrar to fix the problem (a.k.a. “Service Stop”). This requires about 15 minutes to 3 hours of time by the student.

More online support is needed that addresses frequently encountered problems.

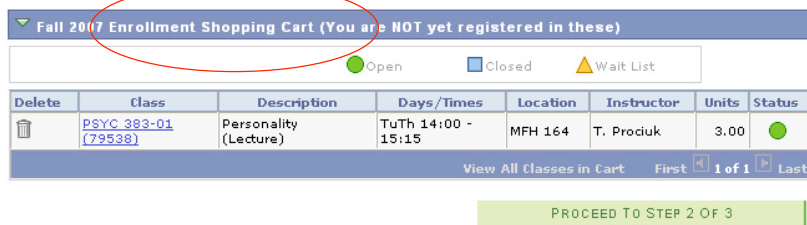
## SES Usability Problems

14) Unhelpful **language**: What is SACR? “[O]ther academic dropdown” contains many helpful items but is not adequately labeled. Blackboard is called “Learning management systems”

15) **The home button** does not return the student to the login page or student centre, the latter is preferred.

16) Weekly class schedule does not print well/easily. A print preview or organizational view would be helpful too.

## SES Usability Problems



The screenshot shows a web interface for a shopping cart. The title bar is blue and contains the text "Fall 2007 Enrollment Shopping Cart (You are NOT yet registered in these)". A red circle is drawn around this title. Below the title bar is a white box with three buttons: "Open" (with a green circle icon), "Closed" (with a blue square icon), and "Wait List" (with a yellow triangle icon). Below this is a table with the following columns: "Delete", "Class", "Description", "Days/Times", "Location", "Instructor", "Units", and "Status". The table contains one row with the following data: "Delete" (trash icon), "Class" ("PSYC 383-01 (79538)"), "Description" ("Personality (Lecture)"), "Days/Times" ("TuTh 14:00 - 15:15"), "Location" ("MPH 164"), "Instructor" ("T. Prociuk"), "Units" ("3.00"), and "Status" (green circle icon). Below the table is a blue bar with the text "View All Classes in Cart" and "First 1 of 1 Last". At the bottom is a green button with the text "PROCEED TO STEP 2 OF 3".

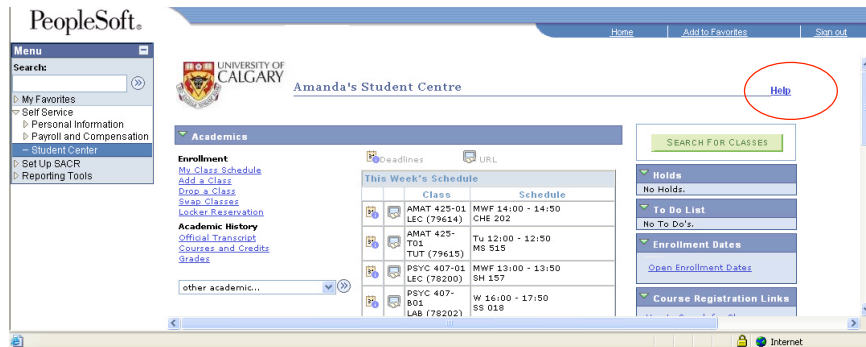
Delete	Class	Description	Days/Times	Location	Instructor	Units	Status
	PSYC 383-01 (79538)	Personality (Lecture)	TuTh 14:00 - 15:15	MPH 164	T. Prociuk	3.00	

View All Classes in Cart First 1 of 1 Last

PROCEED TO STEP 2 OF 3

17) Shopping cart metaphor of registering is demeaning.

## SES Usability Problems



18) **Help** button needs to be huge not tiny. The “Help” was not.

## Top Five Problems of SES

Students were asked to rank the top five problems with SES that they expect to see fixed the next time that they have to register. Solutions to these problems are suggested previously.

- 1) The Back Button
- 2) Searching for Classes
- 3) The Home Button
- 4) Resolution of Laboratory Conflicts
- 5) Registering for BOTH Fall and Winter Terms



## Recommended Action

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University of Calgary students are clearly frustrated and angry by having to use the Student Enrolment System (SES).

The SES registration system should be fixed immediately based on the prioritized input from this usability evaluation.

Ongoing usability testing is also highly recommended and should be written into future PeopleSoft contracts.