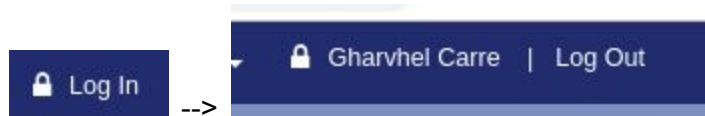


Five Specific Usability Problems

1.

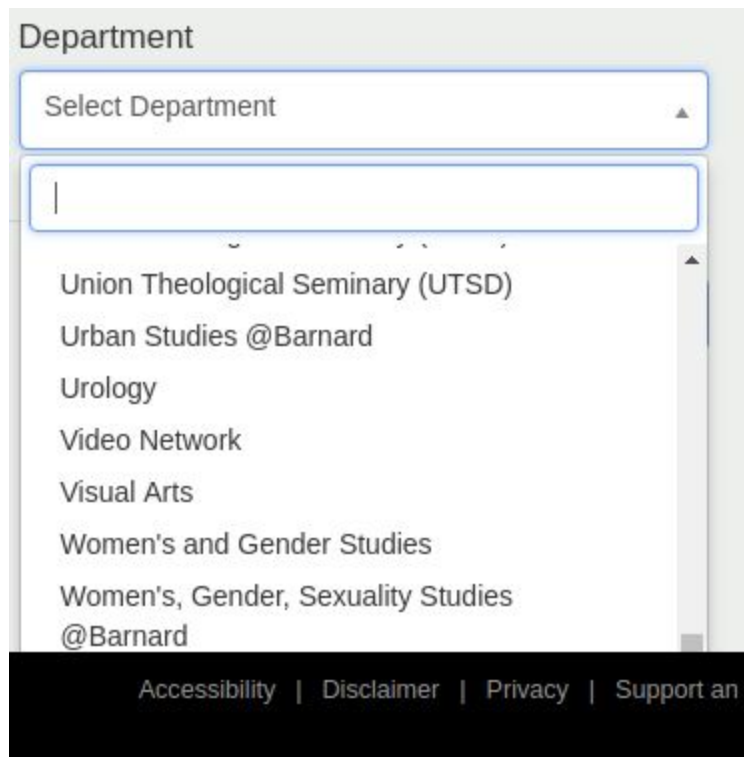
- a. On the first page of virgil, there is a link that says "Log In", after clicking on the link and logging in, the link becomes "Username | Log Out". When you click on the link for username, the system logs the user out.
- b. This breaks Nielsen's Consistency and standards heuristic because the appearance of the link makes it seem as if the text for username is separate from that of the "Log Out" link, especially due to the '|' in between. However, when the username link is click, instead of bringing the user to an options or settings page, the link logs the user out of the system. This is very misleading as the standard is to bring a user to their settings when they click on their username, but it instead logs them out. This can be fixed by making each link separate.



- c.
- d. 3 = Major usability problem: important to fix, so should be given high priority

2.

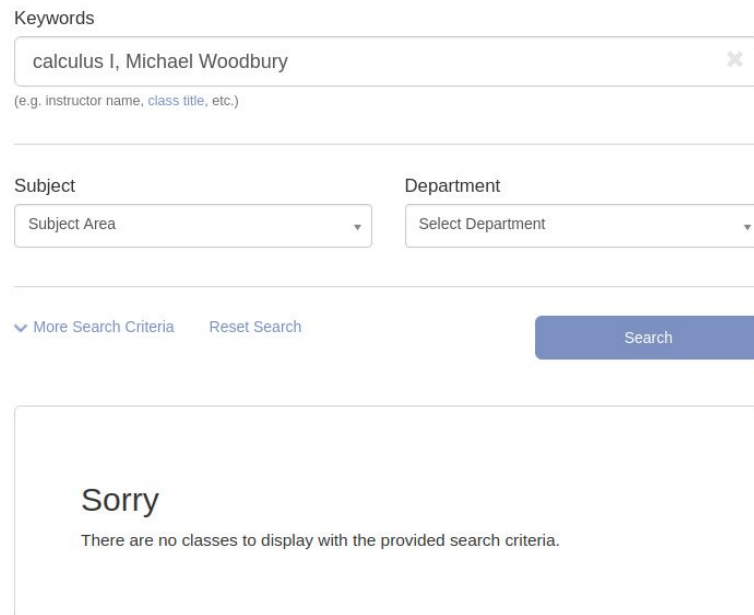
- a. On the first page, when you click the list for select Department, the list opens, however, part of the bottom of the list is cut off by the footer. When you scroll all the way down, part the scroll bar hides under the footer.
- b. This breaks Nielsen's Visibility of system status heuristic because at a certain point when you scroll down, the user becomes unsure of whether or not there are more options available to them. Hence the user cannot be fully informed about his/her options. This can be fixed by allowing padding between the list and footer.



- c.
- d. 1 = Cosmetic problem only: need not be fixed unless extra time is available on project

3.

- a. On the first page, underneath the Keywords search input, the website has the following on it "(e.g. instructor name, [class title](#), etc.)". This makes the user think that they can search with a comma separated list. However that is not a feature.
- b. This breaks Nielsen's Error prevention heuristic because the snippet misleads the user into thinking that they can search in a way that is not possible. The website also doesn't tell the user that it is an invalid input. This might be fixed by simply adding "or" in the snippet;



Keywords

calculus I, Michael Woodbury

(e.g. instructor name, class title, etc.)

Subject

Subject Area

Department

Select Department

More Search Criteria Reset Search Search

Sorry

There are no classes to display with the provided search criteria.

- c.
- d. 2 = Minor usability problem: fixing this should be given low priority

4.

- a. On the first page, under the Keywords input, in the snippet "(e.g. instructor name, class title, etc.)", the text for class title is underline and blue. When you click on the text, it is not a link. Clicking on it brings the user nowhere, it is instead a text that you can hover over.
- b. This breaks Nielsen's consistency and standards heuristic because convention has that these blue and underlined text is supposed to be a link. One would expect that click on class title would lead the user to a page with a list of classes, however it does not. It instead simply tell the user "Ex. American studies".
- c. (e.g. instructor name, class title, etc.)
- d. 2 = Minor usability problem: fixing this should be given low priority

5.

- a. On the first page, after typing something into the Keywords input bar, and selecting a Subject and Department, when the user clicks on "Reset Search", the input inside Keywords disappears, however, the Subject and Department text stays there even though the underlying values have been reset.
- b. This breaks Nielsen's Error prevention heuristic because after the user click on "Reset Search", the user is lead to believe that the values of Subject and Department have not been changed, however they have been. This will lead to errors in the user's search, since, for instance, they might think that they are searching with the filters of Subject: Adult Dentistry and Department: Accounting when in fact there is no filter applied to the search. To fix this issue, simply have the text inside the Subject and Department reset properly.

Search Classes

Keywords

(e.g. instructor name, class title, etc.)

Subject

Adult Dentistry

Department

Accounting (ACCT)

More Search Criteria

Reset Search

Search

Summer 2018 (54)

Fall 2018 (100+)

Spring 2019 (21)

Expand All

Collapse All

Interdisciplinary Senior Seminar

Athena Center For Leadership Studies X3997 (ACLSBC3997) - 4 credits

2

- c.

INTERDISCIPLINARY SENIOR SEM
- d. 3 = Major usability problem: important to fix, so should be given high priority

Full Heuristic Analysis

1. Visibility of system status

- The system should be transparent with the user. The system should make the user aware of its current state at all times through different methods of feedback. For instance, if the system is waiting for data to come in or is hanging, the user should be made aware of things are loading or that there is an error.
- When it comes to Visibility of system status, I think that Vergil does decent job at it. There is appropriate visual feedback when something happens. For instance, when a user adds a course to their planner, the button switches from a green Add to Planner to Red Remove button. This lets the user know that their action has been successfully completed. Another example, is when the user clicks on either Summer 2018 or Fall 2018, whichever tab the user is on, becomes blue. This is great as it makes the user fully aware of which tab they are on. An improvement that could be made is to let the user know that their results are loading as they load.

c.

Add to Planner

-->

Remove

Keywords

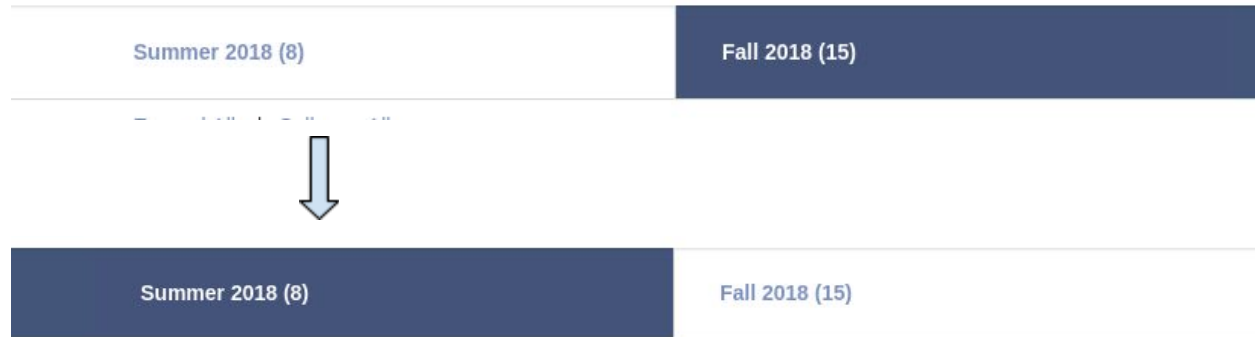
Calculus I



Keywords

Calculus I|





2. Match between system and the real world

- a. The system should use words that everyday users are familiar with, it should not use jargon that only professionals or developers would know such as system-oriented terms.
- b. When it comes to Match between system and the real world, Vergil does a great job at it. There aren't many systems/database level terms such as create table, delete table, etc. The words and icons used on the website are all familiar. For instance, the icon for a planner is visually similar to an actual planner



. The only term which is not of common everyday word is the my DAR. The website also does not explain what it means, everyday students will not know what it is. It should be switched to something like "Degree Audit" instead. With it being named "Degree Audit", students/users would automatically know what it is.



c.

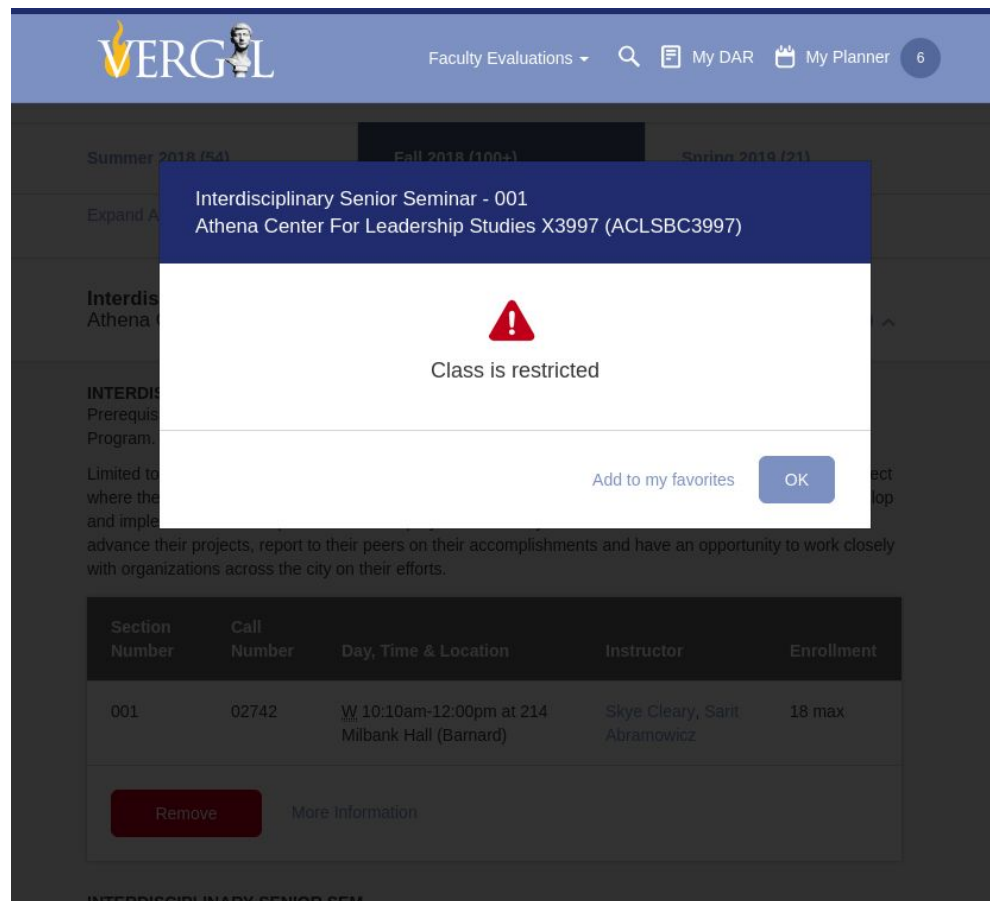
3. User control and freedom

- a. The system should give the user the power to roam around in the application, however, if the user ends up somewhere dangerous or somewhere they shouldn't be, then the system should allow them to immediately exit or undo what they have done.
- b. When it comes to User control and freedom, Vergil does a great job at it. One of the functionalities of the website is the user can add a class to their planner, once added, the user can quickly undo their action by clicking the remove button.



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. With the same functionality, if the user attempts to add a class that they aren't allowed to take, then the system warns them and prevents them from adding the class. The window is closed and the action is automatically undone.



c.

4. Consistency and standards

- a. The system should follow industry standards, and within the system, the system should remain consistent. In other words, if one page in the system uses a particular process, then the same process should apply to other pages.

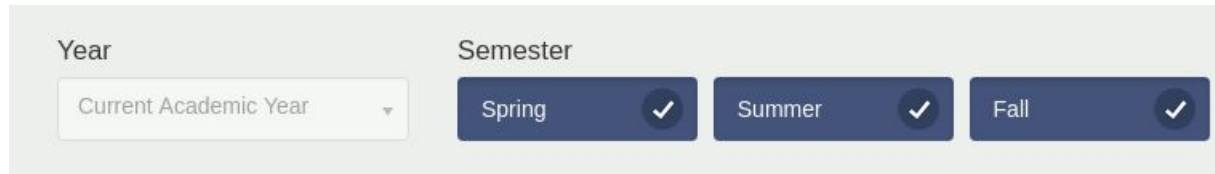
- b. When it comes to Consistency and standards vergil does a decent job at it. One very concerning standard that the system does not follow is the fact that on the first page of virgil, there is a link that says "Log In", after clicking on the link and logging in, the link becomes "Username | Log Out". When you click on the link for username, the system logs the user out. The appearance of the link makes it seem as if the text for username is separate from that of the "Log Out" link, especially due to the '|' in between. However, when the username link is click, instead of bringing the user to an options or settings page, the link logs the user out of the system. Most applications will bring a user to a settings page instead of logging them out, this is very inconsistent.



c.

5. Error prevention

- a. The system should preemptively try to stop the user from making mistakes. This means that the system should prevent the user from doing actions that are not allowed. However, if it is not possible to stop the user from making a mistake, then, the user should be showed an error message. Nonetheless, it is better to prevent than to fix.
- b. On Virgil, on the first page, when the user clicks on more search criteria, one of the options available is the ability to change the academic year. However, some users can only search within the current academic year, and therefore Vergil blocks the user from being able to change the Academic Year. The option is grayed out and prevents a user from using it.



c.

6. Recognition rather than recall

- a. Recognition rather than recall means that the system should try to minimize the amount of memory as user should have to remember. The system should save as much data as it can and transfer that information from page to page. Also, system instructions should be easily accessible to the user on the system. The user should not have to look far on how to use a feature, it should clearly be visible.
- b. When it comes to Recognition rather than recall, the Virgil website is very compliant with it. For instance, when a user makes a search, the user is not expected to remember what they search. The information is instead automatically carried over to the search page.

Keywords

Calculus I



c. (e.g. instructor name, class title, etc.)

7. Flexibility and efficiency of use

- a. This heuristic focuses on the improvement of the speed at which users can use frequent actions. The more common a feature is, to more accessible it should be to the user. A user should not have to go far in order to engage in frequent actions.
- b. When it comes to Flexibility and efficiency of use, Vergil tackles this issue by having the most frequently used features in the menu bar. Frequent features such as search, my DAR and my planner are easily accessible to users. It will only take the user one click to access these features as opposed to having to look through a bunch of pages to get to them. This makes the website more efficient. Vergil also keeps the most common filters unhidden, the Subject and Department filter are seen right away by the user and not tucked in the [▼ More Search Criteria](#) tab. This improves the speed at which most users who want to filter searches can complete such actions.

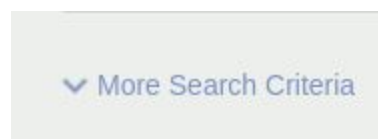


c.

Subject	Department
Actuarial Science	Select Department

8. Aesthetic and minimalist design

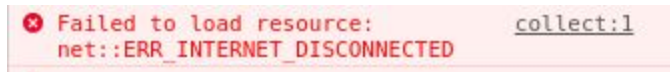
- a. This heuristic focuses on only giving the user minimal and relevant information at once. Information on the screen is always competing for the user's attention and for that reason, it is best to keep it minimal and not bombard the user with information.
- b. Vergil's design is very minimalistic as there isn't a lot of information competing for users attention all at once. For instance, below the keywords search input. We have to option of having many filters for the searches. However, most of them are kept hidden under a "More Search Criteria" option. This keeps the homepage, simple and not confusing. Most searches will not use the hidden filters, so it makes sense to not have all of them on the screen all at once.



c.

9. Help users recognize, diagnose, and recover from errors

- a. This heuristic states that error messages should be displayed in common language. In other words, system level language should not be used when giving a user an error message. Lastly, the error messages should be constructive and offer the user a solution to the error.
- b. When it comes to the Help users recognize, diagnose, and recover from errors heuristic, I found that when internet connection is restricted to vergil, the website fails to inform the user that there is an error. Virgil simply flashes and nothing is showed to the user. The website shows no feedback and the user is left in the dark.



c.

10. Help and documentation

- a. The system should have provide help and documentation to the user. The help and documentation should focus on the features that are most common to the user. They should as well list out simple and succinct steps what is to be done by the user.
- b. When it comes to "Help and documentation", Vergil does a bad job at meeting this requirement. I was not able to find any help or documentation section. The only help tip that I could find on the website is the snippet which say

(e.g. instructor name, class title, etc.)

. Otherwise, Virgil has no other helpful tips or documentation. For instance, I was wondering how to search by a professor's name if they have a middle name and could figure out how to. If looking for professor Jae Woo Lee, Virgil returns no results if the name is entered in the following ways: "Jae Woo Lee". "Jae Lee", "Jae", etc, the name must be entered exactly as follows: "Jae W Lee" in order for Vergil to return valid results. Without documentation it takes a while to figure out how to do simple things, such as looking up a professor with a middle name.