Heuristic Evaluation of QuickPick

Evaluator Characteristics: Macbook Pro (2.66GHz, 8GB, OS X 10.7.3), Chrome 18.0.1025.163, External Keyboard and Mouse

Finding 1: Major – Search results do not integrate Course Number and Title as single entities (Consistency, Efficiency)

Searching for "6.8" will display matching course numbers, but the user should also see the course title to ensure they are selecting the right item. Similarly, when typing a course name, the course numbers are not displayed in the search matches. In the case of searching for User Interface Design, if the user types in 'user' and then selects the only option 'User Interface Design and Implementation, it results in both 6.813 and 6.831 being placed on the user's schedule, which then potentially forces the user to remove the courses they didn't actually want that still met the search criteria.

Recommendation: For the search list, you could concatenate course number with course title and teacher. Then, when the user searches for any of the fields, the entire strings "6.813 User Interface Design (Miller)" or "6.831 User Interface Design (Miller)" can show up as search results, and the user can select the exact one desired.



Finding 2: Good – Draggable Items charge cursor to 'hand' icon (Consistency, Help)

Users can figure out that each course bubble is draggable due to the visual indicator of the cursor. Additional cues could be added to further this effect, such as a dotted line box under one of the schedules with text 'Drag courses here to place them on your schedule'.



Finding 3: Good – Visual Indicators of where items can successfully be dragged and placed (Error Prevention, Freedom)

When dragging, the user can see where an item can be placed based on the color/transparency of the headings. Users cannot place a class in a term in which the course is not offered. Can be further reinforced by adding this information to the text of the course description, stating what valid course terms are.

General Institute Requirements	Course Requirements		
18.01x 0 18.02x 0 8.01x 0	6.02 6.042 0		
8.02x	6.004 6 6.005 6 6.006 6		
	6.034 0 6.033 0 6.046 0		
	6.LAB 0 6.AUS 0 6.AUS 0		
	6.UAT 0 6.UAP 0 18.0X 0		
Freshman Fall	Sophomore Fall		
	6.0 👹 🕚		
Freshman IAP	Sophomore IAP		

Finding 4: Good – Placed courses can replaced or reverted back to original unplaced state (Error Recovery)

The arrow is a good visual cue that a course placement can be undone and moved back to the stable of unplaced courses at the top.



Finding 5: Minor – Electives just float near the search bar (Aesthetic, Consistency)

The set of course electives that were searched for and selected for future placement are not labeled in similar fashion to the required classes.

Recommendation: To be consistent and match the aesthetic already defined for required classes, create another category for 'Electives' and have all searched classes be stored in this section.



Finding 6: Major –A Course Requirement can be placed on schedule before a particular class is selected to meet it (Error Prevention)

The user can place a Course Requirement anywhere on the schedule without actually selecting a course. This allows the user to place the Requirement, then select a course which may not actually be available in that term, creating an error. (In screenshot, 18.024 is not available Freshman Fall but I was able to place it there)

Recommendation: Prevent placement of Course Requirement until the user selects a particular course. Then, the system can check for course availability and restrict placement to terms that offer that course.

General Institute Requirements	General Institute Requirements	
5.11x • 18.014 • 8.011 •	5.11x 18.014 8.011	
8.02x	8.02x 9 7.01x 9	
Freshman Fall	Freshman Fall	
► 18.02x ●	► 18.024 ●	

Finding 7: Major – Selected General course requirement cannot be changed after initial Selection (Error Recovery)

After the user selects one of the options to fulfill a general institute requirement, the bubble turns into a standard class bubble. There is no way for the user to undo this action in the event they want to choose a different class to fulfill this requirement.

Recommendation: Create a mechanism to revert this selection. Perhaps it is doable after clicking the information icon, as the internal dialog was where a particular class was selected to fulfill this general institute requirement.



Finding 8: Minor – Course Titles do not display in window to select course to fill Course Requirements (Consistency)

The title of the course being selected should be displayed to the user when deciding which one to select. Currently, it is unclear what the name of the course is.



Finding 9: Minor – Course Titles are not always formatted well (Aesthetic)

Long course titles need to be formatted and handled correctly. Currently, they can be displayed incorrectly or not even at all.



Finding 10: Major – Visual Indication of Completion (Visibility, Efficiency)

How does the user know when they are 'done' and that their schedule will allow them to graduate? It is clear that the user needs to place all of the Red and Green bubbles on the schedule to meet general requirements, but it is not clear how many electives need to be added and then placed to meet all program requirements.

Recommendation: Consider additional visual cues for elective requirements. Add running counters for specific electives, credit hours, etc.

Finding 11: Minor – Visual Indication of Buttons (Consistency, Visibility)

The buttons in the selection window do not indicate which is selected once clicked. This would help the user clearly understand which one is selected once clicked so they can confirm this is the class they want.

Recommendation: add highlight to the button that is currently selected





Currently, the UI allows each course to be dragged and dropped into certain locations. The drop zones into which a course could be dropped are assumed to be underneath the headings of a particular term, but it can be confusing as to where the border lines are between two drop zones.

Recommendation: Clarify where the drop zones are (perhaps dotted line boxes around each possible drop zone).



Finding 13: Minor – Requirements Ordering (Consistency)

If the user places one of the required courses, then decides to undo that and move the item back to the requirements section, the ordering of requirements list changes. The item fills the last available space, but it then becomes difficult to find a particular course requirement because it is no longer in numerically sorted order.

Recommendation: Keep list of Requirements sorted by course number at all times



Finding 14: Major – Classes can overlap (Error Prevention)

It is possible to drop a course on top of another one. There seems to be some bugs in determining where to render a class bubble once dropped into a valid drop zone.

Freshman Spring		
° 6.01 🔮	* 6.042 B	
	Freshman Fall	Sophomore Fall
		* 18.0X 6 * 6.UAP 6
	* 6.UAT 8 * * 6.02 8	

Finding 15: Major – Courses that Meet multiple requirements (Real World)

There may be some courses that may count for multiple requirements, but there is no need to render multiple course bubbles since the course only needs to be take once. For Instance, 6.813 could be selected for 6.LAB and 6.AUS. But the user would not need to place both 6.813 bubbles on their schedule.

