

# **An Analysis of the English Department Website**

The Undergraduate Course Offerings Page

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## **Introduction**

### **Purpose**

The purpose of this study was to understand users' experiences while navigating and using the Undergraduate Course Offerings page on the English Department Website. More specifically, the goal of this test was to discover potential user pain points with the existing website design, in order to gain insights for the upcoming, redesigned version of the site.

The outline of this test plan consists of my testing goals and research questions, methodologies and user persona, and procedures for conducting the test itself. Additionally, this document describes evaluative metrics, interpretive procedures, and reporting plans. Lastly, this test plan concludes with my recommendations and redesign prototypes.

### **The Undergraduate 'Course Offerings Page'**

The design of the current English Department undergraduate course offerings webpage is a one-page, scrolling webpage with interactive filters at the top. The first row of filters offers to filter between "All, Honors, Onsite, Distance, or Hybrid," while the proceeding rows of filters offer the option of filtering between focus (All, Literature, Creative Writing, Linguistics, and Technical Communication), days of the week a class is offered, and level (All, 2,000, 3,000, 4,000). By clicking on the appropriate filters, the user is allowed to see courses that pertain only to their selected filters. To view instructions for filtering, the user has to select the down arrow to open the accordion tab located at the top of the page that says, "Click here to expand for filtering instructions." Within that tab is also the advisor contact information. The working redesign of the site attempts to minimize scrolling by implementing several accordions, and ensuring that filters will stay visibly selected so that the user is receiving appropriate feedback.

### **Previous Research**

The test goals and research questions for this test plan were based on previous research conducted with the Undergraduate Course Offerings page. Specifically, a site visit occurred in which I spent over an hour with one user, observing as they navigated to and used the undergraduate course offerings page on the site. The site visit can be seen via Appendix A. Another round of research was completed using a paper prototype (viewable in Appendix B) of the Undergraduate Course Offerings Page. The recommendations from both the site visit and the paper prototype include:

- Users would like to easily be able to sift through text on the page
- Users would like features to help reduce the amount of scrolling that is necessary.

- Users want more accessible information to course evaluations, required materials, and logistics for distance courses.

## **Testing Goals and Research Question**

The primary objectives of the UX test were to understand:

- Users' experiences navigating to the Course Offerings page, specifically:
- Pain points while navigating to the page
- Satisfaction and difficulties while navigating to the course offerings page
- Users' expectations of the course offerings page design
- Levels of perceived helpfulness and satisfaction with design components currently required for the page design.

With the knowledge gained through the UX testing, I would then be able to propose new design concepts for the upcoming redesigned version of the department website.

In order to ensure the study met its goals, users completed several tasks, followed by a couple of Likert scale rating post-tasks and a few short answer questions. In particular, the post-task measures that I imposed were meant to measure perceived usability and satisfaction, as according to the user. In order to understand the users' experiences with the undergraduate course offerings page, I chose to have my users fulfill a couple of I chose to have them fulfill a couple of practical tasks including the following two goals:

- Navigate to the Undergraduate Course Offerings page from within the website.
- Create a theoretical design that the user would expect to see once arriving at the Undergraduate Course Offerings page.

Although there was an established research question, there were several sub-questions which I paid attention to. Amongst these, were:

- Are there any commonalities between the pain points of each users' experience, that is, any commonalities between both perceived and voiced pain points?
- Are there any commonalities between the envisioned design concepts put forth by each user?

The sub-research questions are what helped me to form a conclusion and make more specific recommendations regarding the redesign of the Undergraduate Course Offerings page.

Per my mentioning above, I deployed a couple of questionnaires after each task for the user to fill out.

### ***Usability Scale***

A five-point Likert scale was administered after the end of each task (for the first task, to understand the user's perception of their experience regarding ease or difficulty with site navigation, with a rating of one noting that the task was *extremely* easy, and a rating of five meaning that the user noted that the task was *extremely* difficult. For the second task, the Likert scale was deployed as a method to evaluate the helpfulness of future required design components, with a rating of one noting that the user believed the required design components were *least* helpful, and a rating of five noting that the user believed the required design components were *most* helpful).

### ***Perceived Pleasantness/Unpleasantness and Design Component Satisfaction***

Beside the Likert scale asking users to rank their experience with site navigation and perceived helpfulness of required design components (essentially evaluating the usability of the product), another five-point Likert scale was administered after each task to understand the user's perceived pleasantness or unpleasantness of experience with site navigation (with a rating of one noting that the perceived pleasantness-level of site navigation experience was *least* pleasant, and a rating of five noting that the perceived pleasantness level of the site navigation experience was *most* pleasant) and satisfaction or dissatisfaction with required design components for the redesign of the webpage (with a rating of one noting that the user was *least* satisfied with the required design components for the redesign of the webpage, and a rating of five points noting that the user was *most* satisfied with the required design components for the redesign of the webpage). Along with the Likert scale, some open-ended questions were provided for users to voice their opinions about required components for the redesign of the undergraduate course offerings page. Specifically, users were asked about whether they believed the required components should be replaced, if other components should also be required, and if other components should be required, which kind of components should those components be.

### ***User performance and User Recommendations.***

Task performance was measured qualitatively via the see-say-do triangulation method. Users' time on task was measured for completing site navigation to the undergraduate course offerings page. Users' physical and verbal actions were observed during the tasks to determine perceived experience pain points and satisfaction as according to the researcher. The users' drawings of minimal component blank page design prototypes were then evaluated for commonalities to understand any potential user wishes and needs to be implemented as concepts in the redesign of the page, essentially observing what users 'did'.

## **Target User Profiles, User Rationale, and Recruitment Plan**

### ***Target User Profile***

The target user population for this study were English or Technical Communication students between 18-22 years old, who were between sophomore and junior classification, or seniors who were not yet in their graduating semester. It was intended that the user may or may not have familiarity with the current department website, a site which is provided as a primary tool for users to find upcoming course information online. Information about whether the student was 'on-site' or 'distance' was also considered, with the assumption that such a quality could potentially cause some discrepancies or outliers in results. However, both 'distance' and 'on-site' students were allowed to participate. Results of the study could then be noted, and, if there were any discrepancies, an implication of the study would be that another study could be completed, evaluating three on-site users and three distance users, to compose a comparative analysis study of users' experiences. While participating in the study, users were again questioned as to their demographics pertaining to learn more details about each user and also to verify study eligibility.

### ***User Rationale***

Given that registration for the upcoming semester was approaching, users would have been interested in knowing what the upcoming course descriptions were for the purposes of registration. The representative user would most likely visit the course offerings page to view information and perform actions such as:

- the day of the week and time of each course
- the course numbers and CRNs of each course
- the name of each course
- the professor who is teaching each course
- course descriptions by respective professors
- planning which courses to take in the upcoming semester

Therefore, as expressed earlier in this report, the ideal test user would be: current undergraduate students in the English Department who are not yet in their final semester, because those are the users who would be most affected by the redesign of the site.

The importance of noting whether a student was 'on-site' or 'distance' was important to understanding the results, under the rationale that 'distance' users *may* have more experience using the department website to access information than 'on-site' students, who may have constant access to information via word-of-mouth, perhaps just by being in the department building.

### ***Recruitment Plan***

I planned to recruit three to five users for the usability testing. My recruitment plan and strategy for the study was, due to pandemic constraints, entirely electronic through the Department's Undergraduate Listserv. I also gave an incentive (\$10 Amazon gift card) to participate in the study (an idea that I attribute to Jack Labriola) Within a few days, three undergraduate users responded, stating that they met the study qualifications, and that they would be willing to participate in the study. While I am aware that this method may have included a response bias, it was one of the constraints I had to prevail with during the study, since I am unable to *force* anyone to participate, and I was unable to physically recruit people because of health-related situational constraints.

### ***User 1***

The first user to respond and participate in the study was a distance student classified as a junior English major with a concentration in English Language and Literature.

### ***User 2***

The second user to respond and participate was distance student classified as a senior who was not yet in their graduating semester, and who was an English major with a concentration in Technical Communication and Rhetoric.

### ***User 3***

The third user to respond and participate was an on-site student, classified as junior, who was in English double major with concentrations both in English Language and Literature and Technical Communication and Rhetoric.

## **Methods**

### **Informed Consent**

Before each study session commenced for each user, they were each asked a simple yes or no question to verify their consent to participate in the study. Users were also asked whether they had any questions before the study began, to ensure that the pre-test briefing was clear and understood by each user. Consent was asked to maintain an ethical study with human participants.

### **Pre-Test Questionnaire**

As mentioned in the previous section, users were also questioned about their demographics to learn details and verify their eligibility to participate in the study. Specifically, users were asked

their name, concentration (English Language and Literature, Technical Communication and Rhetoric, or Creative Writing), and classification (freshman, sophomore, junior, or senior)

### **Tasks and Scenarios with Post-Task Surveys and Questions**

Before each task commenced, I read the scenario to the users, and then paused to allow them a second to understand the scenario. Then, I read the task to the users, and began timing them as soon as they commenced with each task. During the tasks, I would share my screen via the Screen Share feature on Zoom and ask them to tell me where they wanted to click. Then, I would click wherever they asked me to click. After the first task, users were given a survey with two Likert scales (ranging from one to five), and asked to rate the difficulty and experience (or pleasantness) of the task performed. After the second task, the users were again presented with two Likert scales, ranging from one to five, and were asked to rate the perceived helpfulness/usefulness of the required design components for the English website and also the level of satisfaction with the components. I also made sure to tell each user that perceived helpfulness and satisfaction-levels were different, so that users would not think that helpfulness and satisfaction constituted the same thing.

### **Post-Study Questionnaire**

After the tasks ended, I presented users with a post-study questionnaire to determine how the users normally found course descriptions for the upcoming semester, and then also asked them how often they might use the department website to view the course descriptions.

## **Testing Location and Equipment**

### **Location and Environment**

During the test, I was in the office room of my apartment, while my users were all in their own residences. Zoom meeting software was used to complete the testing. While the test was completed this way because of a pandemic, there were some benefits to having the users being at their home environment while completing the test. Since I was testing a website which people will most likely browse in the comfort of their own home, the limitation of having to stay home actually may have provided users with a more natural environment and level of comfort, rather than performing the study at my office on campus or at a random coffee shop.

### **Equipment**

The equipment that was used to complete the study include Zoom meeting software, my laptop (Lenovo Ideapad Flex 5-1570), and whichever laptop or computers my users were using. I used the 'Stopwatch' option inside the 'Clock' app for Android on my mobile phone (Samsung Galaxy S10e) in order to time each task for each user, and noted the task time on a piece of paper after each task.



## **Test Scenarios**

Each task had a different objective, so each task also had a different testing scenario.

### **Scenario 1**

In the first scenario, before performing the first task, users were told:

“You are an undergraduate student in the English Department, interested in registering for the upcoming semester’s courses. You are trying to locate some basic information about what is being offered in the upcoming semester. You receive an email from the English Department telling you that the course titles and descriptions are up on the website. You know that you can go to the Raiderlink and see the professor teaching each class in order to email them for more information, but you are a reserved, quiet person who does not like to bother too much with human interaction. You want to find these course descriptions provided by faculty members on the Department website.”

### **Scenario 2**

In the first scenario, before performing the first task, users were told:

“We are redesigning the English Department website, and one of the current design focuses is the Course Offerings section of the website. We are trying to improve upon the design to make a better experience for students who want or need to use the site. Upon finding the course offerings page, you will notice minimal, unalterable content, and a blank page. We would like you to help us out with a potential design for the page by drawing the design you would expect to see for the page.”

## **Tasks**

Users were presented with two different tasks. The objective of the first task was to evaluate the user experience with site navigation on the department website, while the objective of the second task was to understand what users wanted for the design on one of the more-often used pages of the site in the upcoming re-designed version of the site.

More specific instructions for each task can be found in the appendix.

### **Task 1: Site Navigation**

Participants were provided with the homepage of the department website that I screen-shared through Zoom from my computer.

- Locate the course offerings page for the upcoming semester on the department website from the home landing page of the site.
- Think aloud, (verbalizing their thoughts) as they navigated the site.

- Inform the test moderator (me) of what they wished to click on, and then I would click on what they asked and share the screen.
- Inform the test moderator when they believed they had landed on the designated page.

***Post-task Survey Questions:***

- “On a Likert scale from one to five, one being the easiest and five being the most difficult, rate the level of difficulty of the task you just performed.”
- “On a Likert scale from one to five, one being the most unpleasant and five being the most pleasant, rate your experience navigating the department website to the Course Offerings page.”

**Task 2: Participatory Design Influence**

Generally, for the second task, users were asked to:

- Draw (using either MS Word and the ‘Draw’ feature, or a physical piece of paper, which they would then take a picture, save, and email to me) their idea for what the page design should look like, using at least four required design components:
  1. Course numbers and titles
  2. Professor name and contact information for each course (professor name and email)
  3. Course description as provided by the respective professor
  4. English Department undergraduate advisor contact information
- Beyond the required components, users were informed that they were allowed to include other design components as well (i.e., filters drop-down menus, sidebars, etc.)
- Inform the test moderator when they were finished drawing

***Post-task Survey Questions:***

- “On a Likert Scale from one to five, one being the least helpful and five being the most helpful, how helpful would you say the required design content is for the Course Offerings page (Professor name and contact information, course name and number, course description, and undergraduate advisor name and contact information).”
- “On a Likert Scale from one to five, one being the least satisfied and five being the most satisfied, how would you rate your level of satisfaction with the required design content for the Course Offerings page?”
- “Would you have different required design content in lieu of the four components you were required to include in your design of the page (professor name and contact information, course name and number, course description, and undergraduate advisor contact information)? Would you add any components? If so, what would your required design components be?”

### ***Post-test Questionnaire:***

The following questions were asked to users after they completed all of the tasks (users were expected to type their own short answers for each question):

- “How do you usually find the courses offered (advisor, professors, website, etc.)?”
- “How often do you utilize the department website to view potential course descriptions?”

## **Evaluation Measures and Metrics**

### **First Task:**

I evaluated user performance for the first task by measuring users’ times on tasks and the number of clicks users made to get to the designated page. I also measured user performance subjectively through the use of Likert scales where users rated their difficulty with the task and their level of experience satisfaction.

### **Second Task:**

I evaluated the second task by noting my observations of the users’ drawings and their comments and suggestions for the site design. Then, I combined my observations and all of the users’ suggestions, noting where similar design concepts were suggested.

## **Results**

### **Limitations on Testing**

Ideally, users would have been tested in an ‘in person,’ setting, in order to better monitor things such as body language, but due to quarantine and social distancing policies, as an effect of COVID 19, all testing was done remotely via Zoom.

## **Findings**

### ***Task 1 Findings:***

- Users took between five to ten seconds to navigate from the homepage of the department website to the course offerings page of the website.
- All users arrived at the designated page within one click.
- All users squinted and leaned closer to their screens, indicating visibility issues
- All difficulty ratings by the users for the first task were between a rating of one and two (signifying that the task was not that difficult).
- All experience ratings by the users for the first task were at a rating of five (signifying that the user experience with site navigation was most pleasant).

### ***Task 2 Findings:***

- Users wanted more information about the logistics of the courses presented on the site with the course descriptions, such as the course day of the week, time, attribute, term offered (fall or spring), (and room number (if in-person)).
- All users wanted design feature that reduced scrolling.

### ***After-task Questionnaire:***

- Most users said they typically used Degreeworks or met with the department advisor to understand which courses were offered.
- Two users commented that they also looked at the department website course offerings page while registering for classes each semester, while one user commented that they never use the department website during their registration process.

### **Test Questions Answered:**

What are potential user pain-points with site navigation?

- While all users rated their experiences as satisfactory, the users' behavior of squinting and leaning closer to the screen denotes potential eye-strain, which is a pain-point in site navigation.

What do users expect to see for the design on the Course Offerings page, and are the current required design components for the page helpful and satisfactory?

- Most users indicated design ideas that would reduce scrolling.
- All users agreed that the required design components for the redesign of the page were helpful and satisfactory, but almost all users indicated that they would like the page to be required to have more logistics available about each course offering.
- Users also indicated that they wished there would be a link in the course descriptions to some past course evaluations for each course, to better assist them in their registration planning.

## **Recommendations**

### **Site Navigation**

For the general website, I would recommend the following:

- Functional buttons, such as the course offerings button, should be placed nearer to the top of the page.
- The home page has a lot of text, so doing anything that would help prevent the user from sifting through text would be helpful.
- Change the name of the link in the breadcrumbs navigation to something more reflective of what is presented on the page (i.e.,

Upcoming or Future Courses), instead of “Current Courses.”

### **Undergraduate Course Offerings Page**

For the design of the undergraduate course offerings page, I recommend:

- Implement devices that make it easier to sift through information and reduce the amount of scrolling and reading the user needs to do (i.e., accordion menus, sidebar navigation, search bars, etc.)
- Implement an easier way for users to see past course evaluations (i.e., a visible link)
- Require that ‘required materials,’ and any other course logistics are presented for each course, regardless of medium.

## **Appendices**

Click on any of the links below to view a specific document.

[Appendix A: Site Visit](#)

[Appendix B: Paper Prototype](#)

[Appendix C: Testing Script and Questionnaires](#)

[Appendix D: User 1 Testing Questionnaire and Script](#)

[Appendix E: User 2 Testing Questionnaire and Script](#)

[Appendix F: User 3 Testing Questionnaire and Script](#)

[Appendix G: User 1 Undergraduate Course Offerings Drawing](#)

[Appendix H: User 2 Undergraduate Course Offerings Drawing](#)

[Appendix I: User 3 Undergraduate Course Offerings Drawing](#)

[Appendix J: User Experience Test Report](#)