

# Usability Auditing, User Testing, and Design Guidelines

In the age of “search and shop” students, your prospects are simultaneously browsing half a dozen (or more) organizations’ websites. Your goal is to attract students to your website and ensure they take the time to read, view, or listen to as much content as possible. You will find countless pieces of advice and competing points of view on navigation optimization, content prioritization, layout, and design. We compiled the most important elements based on expert literature and our own secret-shopping of members’ websites. The checklist below catalogs the critical evaluation criteria for website usability. Additionally, this tool offers guidelines for usability testing, helping you triangulate your own staff’s audit of the website with real user data and prepping you for productive website revision discussions. Finally, this tool includes design guidelines that will provide all marketing stakeholders with a baseline understanding of web design and help your web team and other staff collaborate on design.

## Usability Audit Checklist

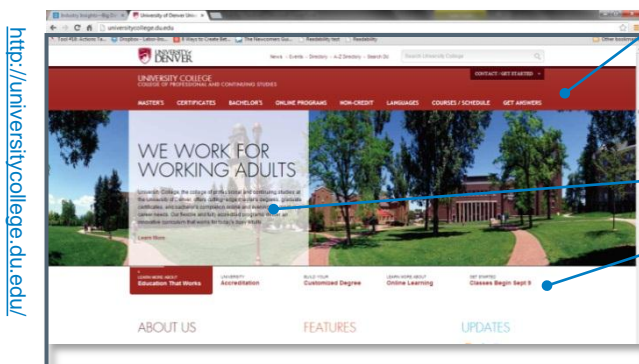
The checklist below allows you and your staff to evaluate usability according to basic web design terms, enabling productive conversations with the web team. The COE Forum recommends that the following audiences review this checklist under these corresponding circumstances:

- Website designers: review when building a new page
- Marketing team delegate (e.g., a student employee): complete a checklist as a quarterly audit for each page of the site
- Marketing leaders: review audit results and bring completed audit checklist(s) to discussions with your web team

Have you prioritized content top-to-bottom with users’ most-needed information at the top of the page in eye-catching display?	
	Place most important content at the top of a page so that user does not have to scroll down (i.e., similar to placing the most important news “above the fold”)
	Structure content to minimize scrolling
	When using search fields, place input field toward the center or right of each page and use a large font for the “search” label

### University of Denver Prioritizes Six Must-Read Messages Using Carousel

In addition to the menu items along the top row which remain consistent throughout browsing the site, the University of Denver University College homepage highlights five take-away messages using a carousel of photos, each of which corresponds to a non-rotating, clickable tab.



Functional links across header are less prominent than carousel of images. Functional links include those related to degree type (e.g., bachelor’s), a link for online programs, a link for non-credit courses, and a link to a course-by-course look-up with meeting times. Finally a link to “get answers” navigates to a menu of transactional information organized by category (e.g., financial aid).

Carousel: Graphics and blurb correspond to tabs described below.

Tabs feature one of these themes, bringing need-to-know messages to the top of the page, catching immediate attention:

- Education That Works for Adults
- Accreditation
- Customized Degrees
- Online Learning
- Getting Started

The College of New Jersey. "IT Web Usability Checklist." 2012. <http://www.tcnj.edu/~it/usability/checklist.html> (accessed 5 Aug 2013)  
 Website Usability Checklist. n.d. <http://www.expertusability.com/wp-content/uploads/2012/07/web-usability-checklist.pdf> (accessed 5 Aug 2013).

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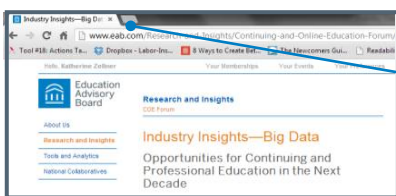
Have you ensured optimal navigation by sub-dividing information into categories and prioritizing search fields?	
	Divide information into easy-reading units. In other words, have you maximized the number of subheads—literally sub-headlines—on each page? <sup>1</sup>
	Check that information is organized with user needs in mind and has been tested with users. See Tool 5 to learn about focus group design
	Ensure that a parent or organizational page serves as an anchor for each major area of the site, with parent pages corresponding to functional information (financial aid, program offerings, online learning) or audience. Defining a site map is one way to ensure categorizations and nesting make sense
	When using search fields, place the input field toward the center or right of each pages and use a large font for the “search” label
Have you included basic back-end design elements that shape the user experience, including title tags and page-not-found default pages?	
	Confirm that each webpage has a title tag in the html code. The title will appear after the tag <title> in your page source, which you can check by clicking “source” under the “view” menu in your web browser
	Select design elements so that website loads within 3 seconds
	Build a custom 404 page for broken links. The search engine, Bing.com, recommends eliminating advertisements and widgets from 404 pages and promotes listing links to about 5 popular pages so that users can re-direct <sup>1</sup>

Oregon State University’s “Degree and Programs” page provides a good example of subtitles here:  
<http://ecampus.oregonstate.edu/online-degrees/programs.htm>

The World Wide Web Consortium offers this advice for title tags: “Since users often consult documents out of context, authors should provide context-rich titles. Thus, instead of ...”Introduction”, which doesn’t provide much contextual background, ...[supply] ”Introduction to Medieval Bee-Keeping” instead.”

### Title Tags Help Users Organize Browser Tabs: Make a Good Impression!

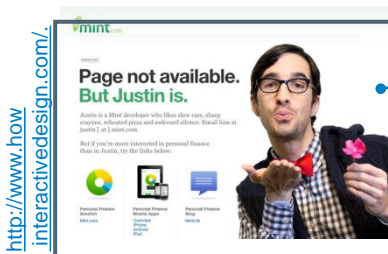
The title tag appears as a label on a browser tab. The example below features an Education Advisory Board page about an industry insights presentation.



The title tag “Industry Insights—Big Data” appears in the tab as a label.

### Craft an Engaging 404 Error Page

Of course we aim to reduce website errors, maximizing the time a website functions and all links work. However, some error is inevitable and, in such cases, it pays to develop error pages that engage and entertain your users.



Mint.com entertains its customers with the message, “Page not available but Justin [an employee on the web team] is.” Below is a light-hearted biography of Justin, including his contact information. Plus, the page features links to three popular products or services: personal finance solutions, the Mint.com app, and a Mint.com blog.

1) “404-Pages Best Practices - Bing Webmaster Tools.” n.d. <http://www.bing.com/webmaster/help/404-pages-best-practices-1c9f53b3> (accessed 20 Aug 2013)

The College of New Jersey. “IT Web Usability Checklist.” 2012. <http://www.tcnj.edu/~it/usability/checklist.html> (accessed 5 Aug 2013)  
 Website Usability Checklist. n.d.. <http://www.expertusability.com/wp-content/uploads/2012/07/web-usability-checklist.pdf> (accessed 5 Aug 2013).  
 W3.org. “The global structure of an HTML document.” n.d. <http://www.w3.org/TR/html401/struct/global.html> (accessed 21 Aug 2013).

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Have you ensured consistent layout throughout the site, especially in use of margins, white space, and footer/header elements?	
	Ensure information and design layout is consistent throughout site, maintaining the same margins from page to page and assigning content to the same page structure throughout website
	Keep footer and header consistent throughout site
	Follow the design guidelines on the final two pages of this tool, which include tips for optimizing white space
	Check that logo and organization name is consistent throughout site, linking back to main page. Ensure that the "home," "contact us," and "about" link on each page in consistent, easy-to-find locations
	Confirm that content is accurate (check event dates, registration deadlines, application information and ensure that most current information is published)
	List a website contact for technical problems and other common user requests. Etsy.com, for example, lists five different contact addresses for five different problems here: <a href="http://www.etsy.com/help/article/486?ref=ft_contact">http://www.etsy.com/help/article/486?ref=ft_contact</a>
	Be on the look out for overly detailed information, applicable to a small proportion of prospects, who will reach out for help when necessary
Have you minimized required scrolling?	
	Structure content so as to minimize horizontal scrolling
	Check that information on the home page can be viewed in no more than to two vertical screen scrolls. In general, a webpage deserves a minimum of 200 words for search engine purposes.

Several members explain that instructors tend to err on the side of over-providing information (including unnecessary detail like course withdrawal policies), which may be of interest to only a few prospective students

News publications such as the *New York Times* paginate an article after 1,000 words. As a general rule of thumb, limit text per page to 1,200 words but remember that images and other web features consume pixel real estate, requiring scrolling.<sup>1</sup>

### Keep Text Succinct, But Informative

We advise using as much text as is needed to communicate a funnel-moving message to a prospective student—not too much text to read at a glance but also not text to little, rendering text uninformative.<sup>1</sup> Firms like Eco SEO consider 300-400 words considered optimal.<sup>2</sup>

### Craft Subtitles Using Same Part of Speech

Consider writing each subtitle in the same part of speech and such that each subhead corresponds to a new category of teaching points. You may also consider writing subtitles before writing the bulk of the page content.

1) Manjoo, Farhad. "The Contemptuous, Myopic, Evil Practice of Breaking Online Stories into Multiple Pages." 2012. [http://www.slate.com/articles/technology/technology/2012/10/website\\_pagination\\_stories\\_should\\_load\\_into\\_a\\_single\\_page\\_every\\_time\\_.html](http://www.slate.com/articles/technology/technology/2012/10/website_pagination_stories_should_load_into_a_single_page_every_time_.html) (accessed 5 Aug 2013).  
 2) Eco SEO. "How Long Should a Web Page Be? | Eco SEO Blog." 2010. <http://www.eco-seo.com/blog/2010/how-long-should-a-web-page-be/> (accessed 5 Aug 2013).

The College of New Jersey. "IT Web Usability Checklist." 2012. <http://www.tcnj.edu/~it/usability/checklist.html> (accessed 5 Aug 2013)  
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<b>Have you selected easy-to-read fonts with a three-to-six level size hierarchy for easy organization, subtitling, and bulleting?</b>	
	Use at minimum 12-point font for headings and 10-point font for text
	Choose fonts optimized for the web and (if applicable) mobile. Additionally, consider whether the font is well-suited to the size of your text
	Limit font hierarchy to a maximum of six font sizes
	Do not capitalize entire words
	Break text into short paragraphs and use headings and sub-headings
	Use bullets to cater to skim readers and offer links to more comprehensive information when communicating especially complicated information
	Left-align text against vertical axis <sup>2</sup>
<b>Ensure links are easy-to-find, descriptive, and ultimately assist in keeping text per page to a manageable amount.</b>	
	Prioritize links and assign those more important links contrasting color, larger font size, and/or a page position that brings the link to the forefront, grabbing user attention
	Link to internal pages when page is overcrowded and too information-heavy
	Use descriptive language in titling links (Instead of saying “explore the COE Forum custom library <a href="#">here</a> ” say “explore the <a href="#">COE Forum custom library.</a> ”
	Ensure that linked graphics are spaced for easy clicking
	Check that all links are active and working
<b>Choose message-sending graphics that are clickable and fast-loading</b>	
	Be sure that each graphic communicates a message or serves a purpose beyond being purely decorative
	Keep in mind the need for fast-loading time when selecting graphic size and quality
	Always use “alternative” text for images, which will display if the image does not load properly and can also be crawled by search engines. Alt tags are also recommended in the ADA for vision-impaired users.
	Add captions or text descriptions to graphics as needed
	Hyperlink graphics as much as possible

Creative Bloq, a daily design e-newsletter, ranks the 30 best free, web-friendly fonts on their [blog](#).<sup>1</sup>

Boston University Metropolitan College’s page on financial aid and scholarships provides a good example bulleted text on its scholarship [website](#)<sup>3</sup>

Ball State University expertly uses descriptive links on this site about [military friendliness](#)<sup>4</sup>:

Alternative text must be entered in website code. Ask your web team to include alternative text after they code the source of each image. The source of the image code below is its filename, “photo\_367.jpg” and the alternative text is “students achieve career goals.”

```

```

### Browse a Free Font Library

Font libraries like <http://www.google.com/fonts/> provide hundreds of free fonts, which you can filter by thickness, slant, width, and with/without serifs (or tails)—Arial font, used in this document, is sans-serif (without a tail). Creative Bloq, a daily design newsletter, praised [Open Sans](#) for being particularly web- and mobile-friendly in large and small sizes.

1) "30 amazing free web fonts | Typography | Creative Bloq." 2013. <http://www.creativebloq.com/typography/best-free-web-fonts-1131610> (accessed 21 Aug 2013).  
 2) "30 amazing free web fonts | Typography | Creative Bloq." 2013. <http://www.creativebloq.com/typography/best-free-web-fonts-1131610> (accessed 21 Aug 2013).  
 3) <http://cms.bsu.edu/academics/collegesanddepartments/online/academics/admissions/applynow/military/degrees/mfs>  
 4) <http://www.bu.edu/met/admissions/financial-aid-scholarships/scholarships/department-of-defense-information-assurance-scholarship/>

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Design intuitive forms using grouping and well-marked required fields	
	Particularly for inquiry forms, check that the page on which the form appears is the page most visited by relevant information-seekers
	Clearly indicate which data is required and/or optional
	Use category headings to separate categories of input
	Ensure all fields have labels

If required fields are clearly marked, the form appears more manageable. Prospects who want personalized outreach can still complete easy-to-find optional fields.

### Weigh the Trade-Offs of Inquiry Form Placement

Inquiry forms can be either general or program-specific, with their orientation affecting their placement on the site. Program-specific inquiry forms hosted on the program website save the prospective student from selecting their program of interest from a pull-down menu. However, COE units should consider how to accommodate prospective students who are deciding among a few programs and how to capture the information of prospective students who never navigate to a program-specific web page.

Should a COE unit host program-specific forms (in pop-up or embedded format) on program websites, avoid asking prospective students to indicate their discipline or program of interest via the inquiry form. Rather, the form should assume that the prospective student is interested in the program whose website hosts the form. Consider the following options for placing various types of inquiry forms:

- Pop-up, full-page, general form accessed via main COE website
- Embedded, general form accessed via main COE website
- Pop-up, general form accessed via program website
- Embedded, general form accessed via program website
- Pop-up, *program-specific* form accessed via program website
- Embedded, *program-specific* form accessed via program website

The Forum recommends dedicating energy first to a stellar general inquiry form, which allows prospective students to select one or more programs of interest. From there, develop inquiry forms customized to specific programs and hosted on program websites as feasible given technology constraints.

**Request-for-Information Form: Example University**  
*Please complete the questions below and we will send more information to the e-mail address you provided.*  
 Please enter your name.\*

[First Name] \_\_\_\_\_  
 [Last Name] \_\_\_\_\_

Please enter your e-mail address.\*  
 \_\_\_\_\_  
 [address@example.com]

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Please indicate your military status if applicable:

*Active duty*  
 *Veteran*  
 *National Guard reserve*  
 *Military family member*  
 *DOD civilian*

A general inquiry form that clearly indicates required fields with an asterisk



# Usability Auditing, User Testing, and Design Guidelines

## Usability Testing Guidelines

A usability checklist prompts your staff to compare your website to must-have elements in navigation, content organization, and layout. However, gathering authentic users' opinions – either current students who converted from a prospect page or individuals whose profiles are similar to those of prospective students – can offer additional perspectives on usability. This gathering of user opinions is called usability testing. Ask a member of your marketing staff to plan a usability testing session using the resources below.

### Elements of a Test Plan

Before scheduling a usability testing session, create a test plan including the elements below, as suggested by the U.S. Department of Health & Human Services<sup>1</sup>.

COE unit-specific purposes are highlighted on the following page

Six to eight participants are sufficient to uncover major usability challenges<sup>1</sup>

Scribes can record additional qualitative metrics: if a user chose the "wrong" link, record which link was followed instead (e.g., clicked student services instead of student testimonials).

- **Scope:** Indicate what you are testing: Give the name of the Web site, Web application, or other product. Specify how much of the product the test will cover (e.g. the prototype as of a specific date; the navigation; navigation and content).
- **Purpose:** Identify the concerns, questions, and goals for this test. Your concerns should drive the scenarios you choose for the usability test. See examples on page 7.
- **Schedule & Location:** Indicate when and where you will do the test.
- **Sessions:** You will want to describe the sessions and the length of the sessions (typically one hour to 90 minutes). When scheduling participants, remember to leave time, usually 30 minutes, between session to reset the environment, to briefly review the session with observer(s) and to allow a cushion for sessions that might end a little late or participants who might arrive a little late
- **Equipment:** Indicate the type of equipment you will be using in the test; desktop, laptop, mobile/Smartphone. If pertinent, include information about the monitor size and resolution, operating system, browser etc. Also indicate if you are planning on recording or audio taping the test sessions or using any special usability testing and/or accessibility tools.
- **Participants:** Indicate the number and types of participants to be tested. Describe how these participants were or will be recruited and consider including the screener as part of the appendix. [A screener is a questionnaire that assesses participants' tech savvy, demographics, and contact information.]
- **Scenarios** [Scenario are the tasks test users should complete on the site]:
  - Record the steps a user should take to find the relevant information. Explain both the main, intended pathway a user will take and any alternative pathways a user might take to accomplish a task in a given scenario. Offer this explanation to observers/note-takers.
  - Ask observers to compare intended (see above) versus actual navigational pathways.
  - Indicate the number and types of tasks included in testing. Typically, for a 60 min. test, you should end up with approximately 10 (+/-2) scenarios for desktop or laptop testing and 8 (+/- 2) scenarios for a mobile/Smartphone test. See page 7 for additional examples.
- **Metrics:**
  - **Qualitative metrics:** Include the questions you are going to ask the participants prior to the sessions (e.g., background questionnaire), after each task scenario is completed (ease and satisfaction questions about the task), and overall ease, satisfaction and likelihood to use/recommend questions when the sessions is completed.
  - **Quantitative metrics:** Indicate the quantitative data you will be measuring in your test (e.g., successful completion rates, error rates, time on task, frequency of specific problems).
- **Roles:** Include a list of the staff who will participate in the usability testing and what role each will play... [Ensure that one facilitator is assigned and one note-taker per participant.]
- **Review :** Compare notes and identify discrepancies in planned and actual navigation

<sup>1</sup>) "Usability Testing." n.d.. <http://www.usability.gov/how-to-and-tools/methods/usability-testing.html> (accessed 6 Aug 2013)

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## Usability Testing Guidelines

### *Sample Purposes*

- Understand how users find tuition information. Recently, students have been e-mailing recruitment officers with questions about tuition that should be easy to find on the website
- Understand how undecided prospects compare programs
- Understand how prospective students interact with frequently asked questions
- Understand how users find testimonials

### *Sample Scenarios*

Ask test users to adapt to scenarios typical of a prospective student, such as these:

- Find tuition information for a particular program
- Find three details about instructors in a particular program
- Navigate to student testimonials
- Navigate to application criteria and deadlines information
- Compare curriculum for two similar programs (e.g., master's of organizational management and MBA)
- Find details about career outcomes for a particular program



Additional usability testing templates, methodologies, and guidelines are available at <http://www.usability.gov/how-to-and-tools/methods/usability-testing.html>

# Usability Auditing, User Testing, and Design Guidelines

## Web Design Handouts for Your Team

### Sample Page Layout

After a usability test, you may receive feedback such as “the site felt cluttered” or “my eye didn’t notice the “apply” button for about 10 seconds.” This type of feedback should prompt a discussion among your web design and content team. Consider circulating these design foundations to educate program directors who occasionally create websites or content, to inform your marketing staff, or to prepare marketing staff for conversations with the web design team. The result: stakeholders use the same terminology and non-designers uploading content, who may affect the site aesthetic, are aware of these foundations. The graphic below, provided by Usability.gov, illustrates how design elements should interact for an intuitive user experience.

Color contrast in the title grabs the reader’s attention

Text spacing and font hierarchy organize navigational elements

Lines help readers easily understand a divide between categories

White space keeps the amount of information on the page readable and easy to understand

Shapes are used to create search fields, backgrounds, buttons, and divisions

Prominently featured images are a focal point and communicate the subject matter of the webpage

Textured backgrounds differentiate the photos, helping them stand out as focal points

The shape of the map also serves as a button

Scaled map makes the page more engaging

### Visual Design Primer

For a more in-depth review of the elements described, review the design principles outlined on usability.gov, a service of the U.S. Department of Health & Human Services. Additionally, we consider [Usability.gov](http://www.usability.gov) a useful starting place for those of you embarking on a redesign. Finally, to save you time, we’ve extracted the principles most relevant to university sites, creating a primer ready for circulation among your staff and offering a solid starting place for any new site creation.

**usability.gov** *Improving the User Experience* Search

### Visual Design

Visual design focuses on the aesthetics of a site and its related materials by strategically implementing images, colors, fonts, and other elements. A successful visual design does not take away from the content on the page or function. Instead, it enhances it by engaging users and helping to build trust and interest in the brand.



# Usability Auditing, User Testing, and Design Guidelines

## Web Design Handouts for Your Team

### Visual Design Primer (Continued)



Search



#### Basic Elements of Visual Design

The basic elements that combine to create visual designs include the following:

- **Lines** connect two points and can be used to help define shapes, make divisions, and create textures...
- **Shapes** are self-contained areas. To define the area, the graphic artist uses lines, differences in value, color, and/or texture. Every object is composed of shapes.
- **Color palette** choices and combinations...differentiate items, create depth, add emphasis, and/or help organize information. .
- **Texture** refers to how a surface feels or is perceived to feel. By repeating an element, a texture will be created and a pattern formed. Depending on how a texture is applied, it may be used strategically to attract or deter attention.
- **Typography** refers to which fonts are chosen, their size, alignment, color, and spacing.
- **Form** applies to three-dimensional objects and describes their volume and mass. Form may be created by combining two or more shapes and can be further enhanced by different tones, textures, and colors.

#### Principles for Creating a Visual Design

A successful visual design applies the following principles to elements noted above and effectively brings them together in a way that makes sense. When trying to figure out how to use the basic elements consider:

- **Unity** has to do with all elements on a page visually or conceptually appearing to belong together. Visual design must strike a balance between unity and variety to avoid a dull or overwhelming design.
- **Gestalt**, in visual design, helps users perceive the overall design as opposed to individual elements. If the design elements are arranged properly, the Gestalt of the overall design will be very clear.
- **Space** is "defined when something is placed in it", according to Alex White in his book, The Elements of Graphic Design. Incorporating space into a design helps reduce noise, increase readability, and/or create illusion. White space is an important part of your layout strategy.
- **Hierarchy** shows the difference in significance between items...(and is created ) through font sizes, colors, and placement on the page.
- **Balance** creates the perception that there is equal distribution. This does not always imply that there is symmetry.
- **Contrast** focuses on making items stand out by emphasizing differences in size, color, direction, and other characteristics.
- **Scale** identifies the range of sizes (and) creates interest...by demonstrating how each item relates to each other based on size.
- **Dominance** focuses on having one element as the focal point and others being subordinate. This is often done through scaling and contrasting based on size, color, position, shape, etc.
- **Similarity** refers to creating continuity throughout a design without direct duplication. Similarity is used to make pieces work together over an interface and help users learn the interface more quickly.