



Behind the Scenes of Academic Library Website Design: Patterns and Trends from 2012 to the Present

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About Us

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Why Study Academic Library Website Design?

- “What do other libraries do?”
- Get a big picture view
- Inform website design decision-making
- Distinguish trends and design patterns
- Find commonalities
- Identify potential partnerships



Research Questions

- Main Website Navigation
 - Design patterns? Labels? Mega footer present?
- Content Management
 - Open source CMS? Responsive design? Redesign?
- Collection Search Options
 - Discovery service? Tabbed vs. single search? Labels? Results?



Research Sample

- 37 academic library websites, all members of the Association of Southeastern Research Libraries (ASERL)
- Large enough sample, but not too large
- Mix of medium and large public and private academic libraries
- Peer group of mostly similar libraries
- Includes some well-staffed institutions with advanced interface designs



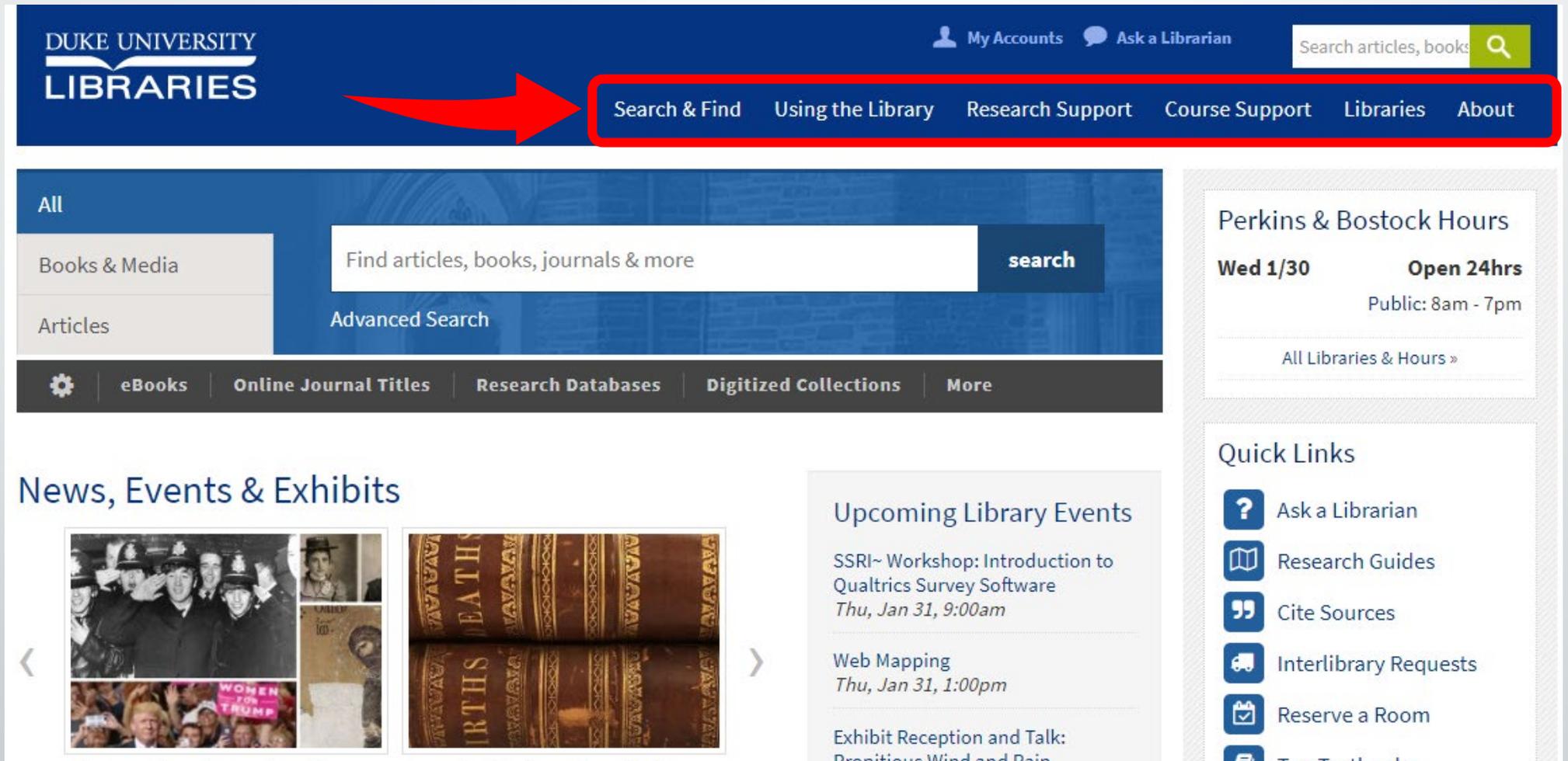
Research Methodology

- Initial Research (2015)
 - Websites visited and evaluated in Fall 2015
 - Internet Archive used to view 2012 versions of websites
 - Data gathered and tracked in a spreadsheet
- Follow Up Research (2018/2019)
 - Websites visited again in late 2018 / early 2019
 - Internet Archive used again to view 2013 and 2016 versions of websites
 - Analysis of data

Website Navigation - Design Patterns

	2012		2015		2019	
Horizontal Nav at Top (with Dropdowns)	18	48.6%	26	70.3%	26	70.3%
Horizontal Nav at Top (Without Dropdowns)	7	18.9%	10	27.0%	9	24.3%
Vertical Nav at Left	7	18.9%	1	2.7%	2	5.4%
Combination	5	13.5%	0	--	0	--

Example of Horizontal Nav at Top



DUKE UNIVERSITY LIBRARIES

My Accounts Ask a Librarian

Search articles, books

Search & Find Using the Library Research Support Course Support Libraries About

All

Books & Media

Articles

Find articles, books, journals & more

search

Advanced Search

eBooks Online Journal Titles Research Databases Digitized Collections More

News, Events & Exhibits

Upcoming Library Events

SSRI~ Workshop: Introduction to Qualtrics Survey Software
Thu, Jan 31, 9:00am

Web Mapping
Thu, Jan 31, 1:00pm

Exhibit Reception and Talk:
Prontious Wind and Rain

Perkins & Bostock Hours

Wed 1/30 Open 24hrs

Public: 8am - 7pm

All Libraries & Hours »

Quick Links

- Ask a Librarian
- Research Guides
- Cite Sources
- Interlibrary Requests
- Reserve a Room
- Top Textbooks



University Libraries



CONNECT, LEARN, DISCOVER
University Libraries connects people with resources, significant collections and expert research services.

Example of Vertical Nav at Left



- › University Libraries
- Search the Libraries
- Browse Special Collections
- Get Research Help
- Find Library Services
- Exhibits, Events and News
- Support the Libraries
- About Us

Search Options

- Multi-Search**
- Library Collections
- Textbooks
- Library Webpages

What does this search?

Enter search terms

SEARCH

Login for Full Access »

- Databases »
- Online Journals »
- PASCAL Delivers »
- Other Search Tools »

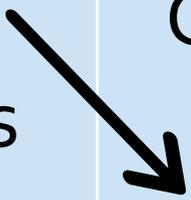


Website Navigation – Labels

1. Focus on Top User Tasks
2. Simplicity
3. Consistent Labelling Style
4. Clear Labels with No Ambiguity
5. Order Matters
6. Give a Sense of Your Organisation

Williams, Olly. "Improving UX with Effective Navigation Labels." *Medium*, (originally published on Torchbox.com). The UX Blog, 24 October 2016, <https://medium.theuxblog.com/improving-ux-with-effective-navigation-labels-aa3ec74a81fb>.

Website Navigation – Labels

	2012 Labels	2015 Labels	2019 Labels
Used More Often 	About Services Research Collections Help Find Search	About Services Research Collections Help Find Search	About Services Collections Help Research Find Search 

Website Navigation – Mega Footers

Mega Footer – a lengthy list of links that often parallel, but sometimes augment, the main navigation

	2015		2019	
Mega Footers Total	13	35.1%	11	29.7%
<i>WITH</i> main nav dropdown	8		6	
<i>WITHOUT</i> main nav dropdown	5		5	



Content Management Systems

“A **content management system (CMS)** is a software application or set of related programs that are used to create and manage digital **content**. CMSes are typically used for **enterprise content management (ECM)** and **web content management (WCM)**.” “A WCM facilitates collaborative authoring for websites.”

Rouse, Margaret. “content management systems (CMS).” *TechTarget*, Wahtls.com. Last updated August 2019, <https://searchcontentmanagement.techtarget.com/definition/content-management-system-CMS>.



Open Source CMS Advantages

- Decentralized access to content updates
- Consistent design
- Administrators can control permissions
- Modular
- Complex development made easy
- Large user communities
- Responsive
- Accessible*

* Comeaux, Dave, and Axel Schmetzke. 2013. "Accessibility of Academic Library Web Sites in North America: Current Status and Trends (2002-2012)." *Library HiTech* 31, 1.8-33 (accessed June 21, 2016).

Open Source CMS Use Trends

	2012		2015		2019	
Total	9	24.3%	19	51.4%	21	56.8%
Drupal	6		10		10	
WordPress	2		8		10	
Plone	1		1		0	
Joomla	0		0		1	

Open Source CMS Use in 2019

Drupal

LSU	Duke
Florida State	NCSU
George Mason	Univ of Georgia
William & Mary	Georgia Tech
UNC Charlotte	Tulane

Wordpress

Univ of Mississippi	Johns Hopkins
Georgia State	Clemson
UNC Chapel Hill	East Carolina
Univ of Alabama	Univ of Central FL
Univ of South FL	UT – Knoxville



Responsive Design

Responsive design is an approach to web page creation that makes use of flexible layouts, flexible images and cascading style sheet media queries. The goal of **responsive design** is to build web pages that detect the visitor's screen size and orientation and change the layout accordingly.

Rouse, Margaret. "responsive design." *TechTarget*, Wahtls.com, Last updated January 2012, <https://whatis.techtarget.com/definition/responsive-design>.

Responsive Design

	2012	2013	2014	2015	2019
Responsive Sites	2	12	23	27	37
	5.4%	32.4%	62.2%	73.0%	100%

Cashmore, Pete. "Why 2013 Is the Year of Responsive Web Design." *Mashable*, 11 December 2012, <https://mashable.com/2012/12/11/responsive-web-design/>.

Redesign

	2010	2011	2012	2013	2014	2015
Redesign	3	3	2	9	11	9
	8.1%	8.1%	5.4%	24.3%	29.7%	24.3%

21 sites have been redesigned since the 2015 study



Collection Search – Web-Scale Discovery

Web-Scale Discovery Services – tools that search seamlessly across a wide range of local and remote content and provide relevance-ranked results – have the ambitious goal of providing a single point of entry into a library's collections.

Breeding Marshall. "Web-Scale Discovery Services." *American Libraries*, 14 January 2014, <https://americanlibrariesmagazine.org/2014/01/14/web-scale-discovery-services/> .

Web-Scale Discovery Service Trends

	2012		2015		2019	
Summon	13	35.1%	13	35.1%	8	21.6%
EDS	7	18.9%	9	24.3%	12	32.4%
Primo	5	13.5%	6	16.2%	12	32.4%
WorldCat Discovery	4	10.8%	5	13.5%	2	5.4%
Encore	2	5.4%	2	5.4%	1	2.7%
None (or custom)	6	16.2%	2	5.4%	2	5.4%

Collection Search – Design Trends

	2012		2015		2019	
Tabbed	27	75.7%	23	62.2%	20	54%
Single	9	21.6%	13	35.1%	17	46%
Multiple	1	2.7%	1	2.7%		

Example of Tabbed Search Design



The image shows a screenshot of the UNC Greensboro University Libraries website. The top navigation bar includes the UNC Greensboro logo with the tagline "Find your way here" and a search bar labeled "Search UNCG". Below this, there are links for "Future Students", "Current Students", "Faculty & Staff", "Alumni", and "Community & Friends", along with "Campus Links".

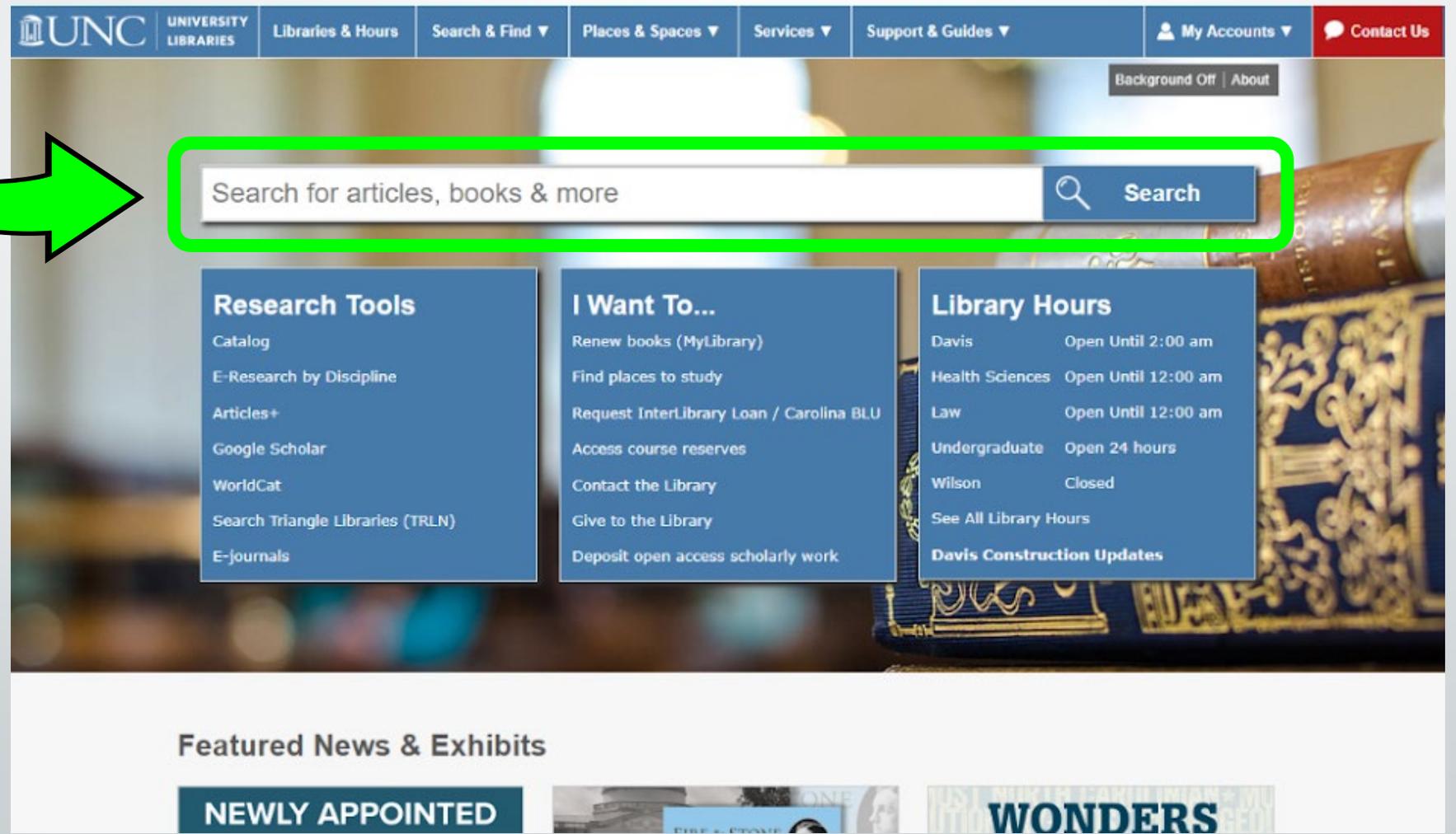
The main header area features the text "UNIVERSITY LIBRARIES" in large, white, serif font. Below this, a red search bar is highlighted with a green border and a green arrow pointing to it. The search bar contains the text "Articles, books, and databases" and a yellow "Search" button. To the right of the search bar is a "Help" button with a vertical label "Help".

The search bar is designed with a tabbed interface. The tabs are: "All" (selected), "Catalog", "Articles", "DVDs", and "Our Web Sites". Below the search bar, there are several links: "Advanced Search", "Databases", "Journal A-Z List", "Research Guides By Subject", and "Course Reserves".

Below the search bar, there is a navigation menu with links for "Libraries & Collections", "Services", "Spaces", and "About Us". To the right of this menu, it says "Jackson Library is currently **OPEN** ([Hours](#))".

The bottom section of the page features a photograph of a library interior with students at computer workstations. To the right of the photo, the text "Available in Jackson Library" is displayed. Below this text, there are two buttons: "Reserve Spaces and Room Equipment" and "118 of 220 desktops for use".

Example of Single Search Design



The screenshot displays the top navigation bar of the UNC University Libraries website. The navigation bar includes the UNC logo, "UNIVERSITY LIBRARIES", and several menu items: "Libraries & Hours", "Search & Find", "Places & Spaces", "Services", "Support & Guides", "My Accounts", and "Contact Us". A search bar is prominently featured, containing the text "Search for articles, books & more" and a "Search" button. A large green arrow points to the search bar. Below the search bar, there are three columns of links: "Research Tools" (Catalog, E-Research by Discipline, Articles+, Google Scholar, WorldCat, Search Triangle Libraries (TRLN), E-journals), "I Want To..." (Renew books (MyLibrary), Find places to study, Request InterLibrary Loan / Carolina BLU, Access course reserves, Contact the Library, Give to the Library, Deposit open access scholarly work), and "Library Hours" (Davis, Health Sciences, Law, Undergraduate, Wilson, See All Library Hours, Davis Construction Updates). At the bottom, there is a section for "Featured News & Exhibits" with a "NEWLY APPOINTED" banner and a "WONDERS" banner.

UNC UNIVERSITY LIBRARIES

Libraries & Hours Search & Find Places & Spaces Services Support & Guides My Accounts Contact Us

Background Off | About

Search for articles, books & more Search

Research Tools

- Catalog
- E-Research by Discipline
- Articles+
- Google Scholar
- WorldCat
- Search Triangle Libraries (TRLN)
- E-journals

I Want To...

- Renew books (MyLibrary)
- Find places to study
- Request InterLibrary Loan / Carolina BLU
- Access course reserves
- Contact the Library
- Give to the Library
- Deposit open access scholarly work

Library Hours

Davis	Open Until 2:00 am
Health Sciences	Open Until 12:00 am
Law	Open Until 12:00 am
Undergraduate	Open 24 hours
Wilson	Closed

See All Library Hours

Davis Construction Updates

Featured News & Exhibits

NEWLY APPOINTED

WONDERS



Collection Search - Labels

Terms most commonly used in tabbed search boxes:

Databases

Search (also within phrases such as "Quick Search" or "One Search")

Catalog

Articles

Books (also within phrases such as "Books & More" or "Books +")

Guides

E-Journals

Collection Search – Results Display

	2019	
Standard	27	73.0%
Custom Bento Box	8	21.6%
Custom Tabbed	1	2.7%
Other	1	2.7%

Example of Bento Box Search Results

ZSR LIBRARY Hours Today: 8AM - 12AM

Find Services Account

SEARCH climate change

Jump to: Articles Books Databases Films Guides Librarians News Periodicals Archives more

ARTICLES

Scholarly & peer-reviewed

Showing 1-3 of 1,179,957 results

CLIMATE CHANGE - Full Text Online
by Richard Hodson
Nature, 10/2017, Volume 550, Issue 7675

Perception of climate change - Full Text Online
by Makiko Sato
Proceedings of the National Academy of Sciences, 09/2012, Volume 109, Issue 37
—Download Article PDF
—Browse Journal Issue Online

Climate Change - Full Text Online
by Hodson, R
NATURE, 10/2017, Volume 550, Issue 7675

More article results >

BOOKS

Books & book chapters, print & electronic

Showing 1-3 of 781,252 results

Climate change: the need to act now : hearing before the Subcommittee on Clean Air and Nuclear Safety of the Committee on Environment and Public Works, United... - eBook
Published 2016

Climate change: the impacts and the need to act : oversight hearing before the Committee on Natural Resources, U.S. House of Representatives, One Hundred... - eBook
Published 2019

Climate change: preparing for the energy transition : oversight hearing before the Subcommittee on Energy and Mineral Resources of the Committee on Natural... - eBook
Published 2019

More book & chapter results >

DATABASES

Research & subject databases

Showing 1-3 of 4 results

Library Literature & Information Science Full Text
A bibliographic database that indexes articles and book reviews in more than 300 library and information science periodicals. Full-text coverage for 148 periodicals is also included. Books, chapters in collected works...

Library, Information Science & Technology Abstracts with Full Text
Provides full text for more than 330 journals and indexes over 560 journals, covering subjects such as librarianship, cataloging, bibliometrics, online information retrieval, information management and more.

Library and Information Science Abstracts (LISA)
A periodical abstracting service designed for librarians and information professionals.

More database results >

FILMS

DVDs, streaming videos, & more

Showing 1-3 of 543 results

Climate Change: The EPA Has Gone Overboard, A Debate - Streaming Video
by Films Media Group
Published 2016
Online Access

Climate change our responsibility - Streaming Video
by Films for the Humanities & Sciences (Firm)
Published 2009
Online Access

Climate Change - Streaming Video
by ABC International.
Published 2012
Online Access

More film results >

GUIDES

Subject guides, course guides, & more

Showing 1-3 of 6 results

Environment - Indigenous Peoples
Sources United Nations Office of HCR "Indigenous Peoples and Climate Change" The United Nations Environment Programme, the section on indigenous Peoples United Nations Human Rights - "Climate Change and Indigenous Peoples"...

Biology Resources - Biology
Biomimetics NDCAA-Biomimetics Biomimetics Links from the Univ. of Lincoln (UK) Biomimetics Links from the Univ. of Maryland Climate Change U.S. Geological Survey Climate Change Climate Change Natural Resources Conservation Program...

Advocacy Organizations - Sustainability Resources
Founded in 1989, its student outreach programs, campus consulting, climate action competition, and educational events and resources reach about 1,000 campuses each year. ... Center for Climate and Energy Solutions An independent, nonprofit organization working...

More research guide results >

LIBRARIANS

Research & subject specialists

No results — Not to worry—just Ask ZSR and we will help!

Find a librarian >

ARCHIVES

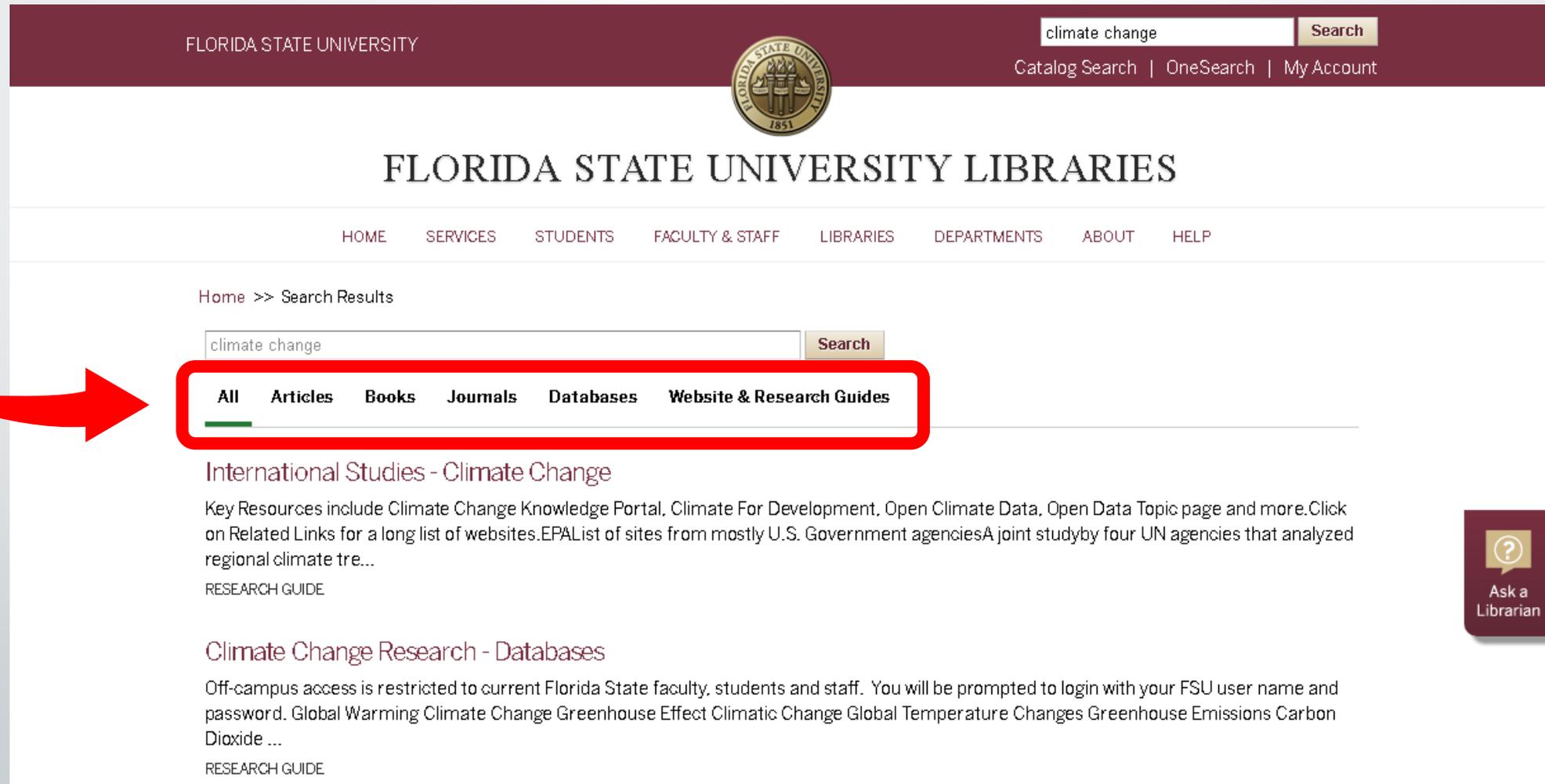
Special Collections & Archives

Showing 1-3 of 6,023 results

Climate Change and Human Rights Law Essay - Full Text Online
by Knox, John H

Four Decades of Andean Timberline Migration and Implications for Biodiversity Loss with Climate Change - Full Text Online
by Silman, Miles R
Rapid 21st-century climate change may lead to large population decreases and extinction in tropical montane cloud forest species in the Andes...

Example of Tabbed Search Results



The screenshot shows the Florida State University Libraries search results page for the query "climate change". The page features a dark red header with the university's name and logo, a search bar with the query "climate change" and a "Search" button, and navigation links for "Catalog Search", "OneSearch", and "My Account". Below the header is a white navigation bar with links for "HOME", "SERVICES", "STUDENTS", "FACULTY & STAFF", "LIBRARIES", "DEPARTMENTS", "ABOUT", and "HELP". The main content area shows the search results for "climate change", with a red box highlighting the tabbed navigation options: "All", "Articles", "Books", "Journals", "Databases", and "Website & Research Guides". The "All" tab is selected, indicated by a green underline. Below the tabs, the search results are displayed in two sections: "International Studies - Climate Change" and "Climate Change Research - Databases". Each section includes a brief description of the resources and a "RESEARCH GUIDE" link. A red arrow points to the tabbed navigation area.

FLORIDA STATE UNIVERSITY

climate change Search

Catalog Search | OneSearch | My Account

FLORIDA STATE UNIVERSITY LIBRARIES

HOME SERVICES STUDENTS FACULTY & STAFF LIBRARIES DEPARTMENTS ABOUT HELP

Home >> Search Results

climate change Search

All Articles Books Journals Databases Website & Research Guides

International Studies - Climate Change

Key Resources include Climate Change Knowledge Portal, Climate For Development, Open Climate Data, Open Data Topic page and more. Click on Related Links for a long list of websites. EPA List of sites from mostly U.S. Government agencies A joint study by four UN agencies that analyzed regional climate tre...

RESEARCH GUIDE

Climate Change Research - Databases

Off-campus access is restricted to current Florida State faculty, students and staff. You will be prompted to login with your FSU user name and password. Global Warming Climate Change Greenhouse Effect Climatic Change Global Temperature Changes Greenhouse Emissions Carbon Dioxide ...

RESEARCH GUIDE

Ask a Librarian

Design Commonalities in 2019

- **Main Website Navigation:**

- Horizontal Nav at Top with Dropdowns – 70%
- Navigation Labels – About | Services | Collections | Help | Research | Find | Search
- Mega Footer – 30%

- **Content Management**

- Open Source – 57% (Drupal & Wordpress most common)
- Responsive Design – 100%
- Redesign – 25 to 30% per year (every 3-4 years)

- **Collection Search Options**

- Web-Scale Discovery – 95% (EDS and Primo most common)
- Tabbed Search – 54% Single Search – 46%
- Tabbed Labels – Databases | Search | Catalog | Articles | Books | Guides | E-Journals
- Standard Results – 73% Bento Box – 22%



What's Next?

Publication of 2012-2015 study:

Comeaux, David J. (2017) "Web Design Trends in Academic Libraries—A Longitudinal Study." *Journal of Web Librarianship*, 11:1, 1-15,
<https://www.tandfonline.com/doi/full/10.1080/19322909.2016.1230031>.

Publication of 2019 follow-up study anticipated soon