Lingnan University

Web Publishing Guideline

Revision History

Version	Prepared By	Approved By	Date	Revision
1.0	Jeff McDonell, ITSC		Aug 2008	Initial version
1.1	ITSC		Dec 2019	
1.2	ITSC	TLISMB	23 Jan 2020	
1.3	ITSC		July 2021	Replace Internet Explorer to Microsoft Edge
1.4	ITSC	ISMB	28 Feb 2022	
1.5	ITSC		13 Mar 2024	Adding addition security measures

1. Web Standards

All websites are to be developed using internationally accepted best design practice which aims to make web pages accessible to all site visitors. Designers should avoid making assumptions about the way visitors will view the site. All websites should comply with the following standards:

- Web Content Accessibility Guidelines (WCAG), developed by World Wide Web consortium's (WC3) Web Accessibility Initiative (http://www.w3.org/WAI) CAG2.0.
- HTML 4.01 Specification (https://www.w3.org/TR/html401/)
- Support for a range of web browsers and operating systems, including Internet Explorer, Firefox, Chrome and Safari browsers, on both PCs and MACs to cater for the diverse audience that visits University websites.

If Facilities and Units would like to follow the Web Content Accessibility Guidelines (WCAG) developed by World Wide Web consortium's (WC3), more information can be found in Section 3.15.

2. Design Elements for Website

2.1   All Lingnan University websites should maintain a consistent "look and feel" and Lingnan Identity. A University "Header and Footer" should be used across all University websites. Information Technology Services Centre (ITSC) will provide the "Header and Footer" to be included on the website. It consists of Header, Basic grid, and Footer.

2.2   Departmental website developed internally by departments or externally by vendors, must conform to the Website Development Policy and this Web Publishing Guideline.

2.3   The website/system must be developed with Responsive Design for three size views (large, medium, and small), that works with all mobile devices, tablets and desktop computers.

2.4   Staff members with administrative rights are responsible for ensuring that the information published and represented on the website is factually accurate and grammatically correct. If errors are found, then the relevant webmaster should perform necessary correction under the supervision of a staff member that has administrative oversight of the website.

2.5   Visual Guidelines
- Simple is the best
- Clear heading and sub-heading
- Avoid using multiple colors on the overall color theme
- Each page should not be more than two pages long; break it into different sections if necessary
- Avoid using pop-up/new window in links, except for external links or document files, such as pdf, word files, etc.

2.6   Departments can refer to Lingnan University Graphic Identity Guidelines provided by Office of Communications and Public Affairs (OCPA): https://www.ln.edu.hk/ocpa/corporate-identity.

2.7   Department websites must have a URL link to direct users back to the Lingnan University homepage and to their own websites.

2.8   Departmental websites must include some description of the Department or Unit.

2.9   Departmental websites must contain a contact email address.

2.10 Information on the website must be kept up-to-date as always.

3.   Guideline for Technical Elements

3.1   Do not use Adobe Flash or Java, or other outdated or end-of-support plugin.

3.2   The system should be able to support different language including English, Traditional Chinese and Simplified Chinese in UTF-8 encoding for all pages display and data input.

3.3   The system should be developed and hosted for the platform specified in Lingnan University Web Server Infrastructure.

3.4   If authentication is required for some websites, Lingnan Authentication Method, ADFS should be used for internal users.

3.5   The system must pass ALL the Web Vulnerability Scanning performed by ITSC.

3.6 All websites should include Responsive Design:
- Three size views (large, medium and small) for mobile devices, tablets and desktop computers.
- All websites should be relative in percentage and scalable by any size of web browser.
- Font size should be scalable by either percentage or em unit.

3.7 Support a range of web browsers up to the latest version, including Microsoft Edge, Firefox, Chrome and Safari browsers, for both PCs and MACs.

3.8 CSS style sheets should be used in developing content layout.

3.9 Naming Conventions: when creating new websites or adding new sections to existing sites, files and directories should be named based on the following guidelines:
- Directory and files names should not contain spaces or any special or Chinese characters, etc.
- URLs should NOT contain underscores (_), capital letters or any characters that require the use of the Shift key in order for the URL to be typed into a browser.
- Hyperlinks should always be coded to include a trailing slash at the end of the directory name, e.g. http://www.ln.edu.hk/itsc/.
- Filenames should be kept as short as possible.

3.10 All websites must include, as a minimum, the following metadata elements, and use the unqualified…
- <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
- <meta name="dc.title" content=" ">
- <meta name="description" content=" ">
- <meta name="keywords" content=" ">

3.11 Ensure all web files (html and image files) are uploaded to the web server in LOWERCASE. 'INDEX.HTML' is not the same as 'INDEX.html', nor is it the same as 'index.html'. Uppercase and lowercase does matter in some browsers.

3.12 Images on websites should have "alt" parameters to speed up document readability.

3.13 CAPTCHA must be used for ALL login pages or web submission forms.

3.14 The website should be developed under Development platform e.g. "xxxdev" / "xxxdev"

and deployed to "xxprod" / "xxxprod". Dynamic hosting must be used, that is, all references should be pointed to "/localhost/" instead and no hardcode to any other paths.

3.15 Web Content Accessibility Guidelines (WCAG) (Optional Standard)
Web Content Accessibility Guidelines (WCAG) is developed by W3C (World Wide Web Consortium). This is an international web content accessibility standard to ensure that websites are accessible to all people, including people with disabilities, to enhance their user experience. Further, this also often makes our web content more usable to users in general. There are three levels of WCAG standard, WCAG 2.0 – Level A, Level AA, Level AAA.

For information on how to meet WCAG (Quick Reference) can be found in this link:
https://www.w3.org/WAI/WCAG21/quickref/?versions=2.0

This is an optional standard to be followed by Faculties and Units.   ITSC can assist with the validation checking and provide the validation report for department to follow.

4. Security Measures

4.1   Restrict File Uploads: All files uploaded to the web server must be restricted to eligible Lingnan University staff who have been granted the necessary permissions. This will help ensure that only authorized individuals can upload files to departmental websites.

4.2   Admin Login Page Restrictions: All admin login pages should be restricted to access only within the campus network by Lingnan staff. This will enhance the security of our websites by limiting access to trusted internal networks and preventing any hacking activities by external entities.

4.3   File Validation for CMS: The departmental Content Management System (CMS) should be configured to validate all uploaded files, including verifying their true file type and file permissions when they are uploaded to the web server. This will help identify and prevent the upload of potentially executable files.

5. Information Privacy

Staff members are required by the Office of the Privacy Commissioner for Personal Data to

include a privacy disclaimer and a Personal Information Collection (PIC) statement in their website, as well as a link to Lingnan University's Privacy Policy Statement (PPS) if they want to collect personal data of visitors. Guidelines for collecting information are available from Lingnan Data Protection website at: https://www.ln.edu.hk/dpp/.

6.   Disclaimer and Copyright

6.1   The following copyright issues should be addressed during the design and development of websites:
   -   ensure Lingnan University's own copyright notice is asserted.
   -   ensure that Lingnan University does not infringe the copyright of any third party when using materials in which the copyright is not owned by Lingnan University.

6.2   All Lingnan University websites should have the following copyright identifier in the footer across all web pages. The standard template provides these links by default. Any website that is not developed by ITSC should include the "Header and Footer" element provided by ITSC.
   Copyright(c)"year" Lingnan University. All rights reserved.
   Privacy Policy http://www.ln.edu.hk/privacy-policy

6.3   Extra precautions should be taken when linking to other websites. Staff should never assume that all materials on the Internet are acceptable by Lingnan University. When in doubt, please contact ITSC, OCPA or the President's Office. Always check for dead web links. Some websites not only update information from time to time, but from one location to another. Some websites may provide secondary links to archives that may contain illegal software or inappropriate content, such as pornographic or racist material. Always check that links do not direct users to dubious websites. Staff and their departments/units are responsible and accountable for all web links on their websites.

6.4   All University websites must contain a link (in the footer section of each page) to the University disclaimer statement: https://www.ln.edu.hk/disclaimer.

7.   General Considerations

7.1   Make sure that the Title HTML tag matches as closely as possible to the actual title that appears on the website.

7.2　File size and download times should be taken into consideration, to allow files to be downloaded fast enough to cater for diverse audiences with different Internet connection speed. PageSpeed Insights (PSI) reports on the performance of a page on both mobile and desktop devices, and provides suggestions on how that page may be improved: https://developers.google.com/speed/pagespeed/insights/

7.3　Maximum page file size should be kept around 500KB as a standard adopted for all university websites based on ITSC best practices. Please keep in mind that the size of a file can vary when it is viewed on disk and viewed from the server, especially when dynamic content is involved. The easiest way to check the size of a file on a server is to open the page in a browser and check the file size in the properties dialog box.

7.4　The viewer should be provided with warnings where files are available for download, especially for large files.

7.5　It is the best practice to add "Page last updated: <date>" to the website. This will attract readers to come back for more updated information and let the staff member know when he / she has last updated the department's website or document.

7.6　An average page length should be no more than 2-3 screens. For lengthy documents, divide the documents and use hyperlinks for lengthy documents.

7.7　Websites that are incomplete or undergoing a revamp should be clearly marked as "Under Construction". Please indicate the availability date of the material, and avoid providing links to unfinished pages.

7.8　Provide the name & contact details of the departmental webmaster on the main website.

7.9　All web images should be clearly labeled, for example, the ITSC department main logo should be named "itsc-logo.gif".

7.10 Staff should always include a home button that leads the user back to the University website.　If a website is more than two levels deep, it is advisable to add a home button to the departmental webpage. It is not necessary to create a 'back' button just for a website which is one level down, as this function can be achieved simply by using the back function of the browser.

8. ITSC Workflow and Procedures for Website Development

8.1 Request for a website

- Contact ITSC Web Services & Projects team to discuss the website development options.
- Submit the request to ITSC Helpdesk (https://www.ln.edu.hk/itsc/desktop/helpdesk).
- ITSC will set up the platform for the Department according to the method used.

8.2 Before deploying to Production

- The system must pass ALL the Web Vulnerability Scanning performed by ITSC.
- The system must pass ALL Responsive Design Elements scanning by ITSC.
- For those websites that would like to comply with the Web Content Accessibility Guidelines (WCAG) standards, ITSC can assist with the validation checking and provide the validation report for department to follow.
- Send the confirmed layout to ITSC for validating header and footer, color contrast, etc.
- It usually takes 3 working days for ITSC to scan and prepare the Accessibility and Vulnerability reports. It may take at least 5 working days for the vendor or department web master to work on the modification, depending on the number of issues found.
- Please notify ITSC at least 3 working days before the website/system launch date, so that ITSC has sufficient time/resource for the production deployment.

- End -