



UNIVERSITY  
OF LODZ



**Content preparation standards in accordance  
with WCAG 2.1 at the AA level. UniLodz  
Community Handbook**



# Content

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# Content preparation standards in accordance with WCAG 2.1 at the AA level

The WCAG 2.1 standard (Web Content Accessibility Guidelines version 2.1) is a document that provides a set of guidelines on how to make web content more accessible to the widest possible audience, regardless of the physical limitations of the user or the situation in which they find themselves. It defines a set of principles, guidelines and criteria, as well as the matching levels of compliance that can/should be achieved. Following them is to guarantee the widest possible audience, with particular focus on people with disabilities, convenient access to online content and legibility of documents.

All the criteria and full Web Content Accessibility Guidelines are available on the [World Wide Web Consortium \(W3C\)](#).

According to [the Act of 4 April 2019 on the digital accessibility of websites and mobile applications of public entities](#), as a public university we are obliged to ensure such accessibility.

It is important to remember that web accessibility does not only refer to the content displayed directly on websites but also to the elements of a website or mobile application', i.e. all texts, graphics, charts, maps, multimedia, animations, files (attached to the websites or e-mails) and tools for interactive data sending.

The guide takes into account the recommendations directly contained in WCAG 2.1, as well as examples provided by other entities including generally accepted good practices.

# Basic principles of **content formatting**

- To create large text documents, including folders and simple brochures, use specialised typesetting software. In the absence of such programs, use Microsoft Word;
- The applied typefaces (fonts) should be sans-serif (simple, without additional embellishments) thus, significantly increasing readability. The proposed publicly available typefaces are: Calibri (preferred due to the University's Visual Identity System), Arial, Verdana and Tahoma;
- Use a normal/regular typeface for content composition;
- The most important key words in the text can be highlighted for example in bold; this makes it easier to find your way around and return to the interrupted reading. Remember to be moderate – too much bold in the text reduces its readability;
- Limit writing in italics. Written this way too long texts become unreadable for some dyslexic people (if you highlight a quote this way, remember about the inverted commas);
- Do not use such typefaces as thin/hairline/condensed and similar;
- The text (font) size should be minimum 11 points for basic content;
- Content should be left-aligned (do not justify texts);
- The leading should be 1.5 times the typeface used: e.g. or a text with size 12, the leading should be 18 points;
- Changing the font colour must not be the only differentiator for the content – it can only play a decorative role. Use a bold typeface for highlighted information;

- The text must be properly formatted: divided into paragraphs that are not too long and have properly marked headings;
- Paragraph spacing should be 2 times the size of the font: for a text written in 12 point size, with 18 point leading, the paragraph spacing should be 24 points;
- Do not make breaks between paragraphs by repeatedly pressing the 'enter' key. Spacing should be created by specifying the spacing before and after the paragraph in the paragraph/style settings. Similarly, create text offsets – use the 'tab' key instead of repeatedly inserting spaces;
- Use built-in styles: Heading 1, Heading 2, etc., which allow people to use keyboards and screen readers to move the cursor directly to the selected heading. Properly marked headings allow the outline of the document to be displayed in such a way that you can quickly familiarise yourself with its structure;
- You can edit, change the font, colour and size of each style (including Heading 1, Heading 2) to suit your own preferences (while keeping in mind the guidelines mentioned above);
- Use lists: bullet or numbered ones where you list elements of content. Dotted lists (bullet points) are used when the order of the items is not important, numbered lists (numbering) are used to record a list for which the order of the individual items is crucial. Whenever possible (if the software you are using has this function – e.g. in Microsoft Word) use the 'list' function;
- Do not replace bullets/numbers with other graphical equivalents (e.g. do not insert hyphens yourself instead of the points available when selecting the "list" option). It is recommended that the lists are not too extensive – they should reach a maximum of the third level of nesting (1.1.1);
- Create tables only for the purpose of presentation of data or content that cannot be presented any other way. Tables must not be used to structure a document (e.g.: it is not allowed to create a two-column layout using a table with transparent borders and content);

- When creating a table, use the “Insert Table” function (if the software you are using has this function – e.g. in Microsoft Word);
- Tables must be homogeneous (the same number of cells in each row and column) and grid lines must be visible to visually identify rows and columns;
- The text in the table should be aligned properly: in columns to the left, and numerical data to the right or to the decimal point;
- When inserting a table, remember to define the table header row(s) – for visually impaired people using a screen reader, this will enable them to understand the meaning of the content of the table cells being read;
- Use the “Repeat header row on new pages” function when the table occupies more than one page of the document – then the header row will be automatically repeated on the subsequent pages;
- When inserting hyperlinks (links), remember to describe them appropriately. Links should be clearly highlighted (bold, underline, colour – remember that colour must not be the only differentiator) and the sub-linked content must clearly describe what the effect of clicking the link will be;
- Each link should be unique. Do not use ‘click’, ‘read more’ or ‘here’, instead use a more appropriate form: ‘for more information about ... (specify what?) see XYZ.co.uk’;
- Also, do not paste hyperlinks on their own – it is essential to indicate their purpose, i.e. to include information in the label or description of the link referring to what the link is about. When inserting a hyperlink, if possible (if the software you are using has this function – e.g. in Microsoft Word), use the “Insert hyperlink” function;
- Don’t create vertical subtitles, this disrupts the order in which the text is read;

- Avoid footnotes wherever possible. Some screen readers read them in the wrong order for the whole document structure;
- When adding attachments, remember to name them appropriately and uniquely – do not add files with working names. Titles of attachments must be self-explanatory and describe the indicated file;
- In a link that allows you to download a file you have posted on the website, remember to enter the type of attachment (e.g. PDF) and its size in KB;
- When creating a Microsoft PowerPoint multimedia presentation, remember to title individual slides and keep the order of the content clear, as well as keep the correct colour contrast of the presentation elements.

## Keeping appropriate contrast **between the individual elements**

An important aspect of web accessibility is the contrast of the elements appearing on the website (**critterion 1.4.3 of WCAG 2.1**), including the contrast of individual elements in the attached files. In practice, this means that the text must be legible and the choice of background colour must not be dictated solely by aesthetics.

**To meet the WCAG Level AA 2.1 requirements, the contrast of the text against the background should be:**

- For the content written in a typeface of less than 18 points (normal text) – 4.5:1;
- For the content written in a typeface equal or above 18 points (non-bold text) and 14 points in the case of bold text (large text) – 3:1.

The contrast of different colour combinations can be checked using special software or on dedicated websites, including [webaim.org](http://webaim.org) website.

**Examples of colours assigned to the individual faculties and their proposed substitutes to be used in text documents in combination with the white colour (white background (#FFFFFF) – coloured letters and white letters on a coloured background) written in the HEX colour space:**

- #80A41B – colour of the Faculty of Biology and Environmental Protection (the colour does not meet minimum requirements, suggested substitute: #398700)
- #009F98 – colour of the Faculty of Chemistry (the colour does not meet minimum requirements, suggested substitute: #00857e)
- #72207E – colour of the Faculty of Economics and Sociology
- #14133B – colour of the Faculty of Philology
- #00695A – colour of the Faculty of Philosophy and History
- #EF7D00 – colour of the Faculty of Physics and Applied Informatics (the colour does not meet minimum requirements, suggested substitute: #b35c00)
- #00894C – colour of the Faculty of Mathematics and Computer Science (the colour does not meet minimum requirements, suggested substitute: #008a00)
- #5E7E29 – colour of the Faculty of Geographical Sciences
- #E29C00 – colour of the Faculty of Educational Sciences (the colour does not meet minimum requirements, proposed replacement: #9E6C00)
- #CF0E3E – colour of the Faculty of Law and Administration
- #2C55A2 – colour of the Faculty of International and Political Studies
- #2A98CD – colour of the Faculty of Management (the colour does not meet minimum requirements, suggested substitute: #237ca9 or #EA0000)
- #E5231B – colour of the University of Lodz



# Graphic elements. **Alternative descriptions**

Appropriate marking and description of graphic elements constitute another very important aspect of ensuring accessibility of websites and documents. Such graphic elements are, among others:

- Photos;
- Graphics;
- Charts;
- Infographics;
- PDF files.

Graphic files, whether posted directly on websites or inserted into the content of documents, are by definition not accessible to visually impaired people. In order for each element to comply with WCAG 2.1, it should be additionally described with a concise, informative description called ‘an alternative text’.

An alternative text is textual information about what you see in a graphic element that is relevant to the text or topic that the element illustrates. Alternative texts are read by a screen reader and allow blind people to see what is, for example, in a given graphic, photo or chart.

Graphic elements without an alternative description will be read by the assistive software for visually impaired people as the word ‘graphic’, so they will not get any other information that this ‘graphic’ is supposed to convey.

## **What should an alternative text look like?**

- Above all, the description should be concise and succinct – try to describe the graphic as accurately as possible, doing so in the shortest possible way (the optimum length of an alternative text should not exceed 250 characters);

- It should describe the meaning and content of the graphic element in question;
- It should contain key information for the viewer (e.g. a repetition of the content written on the graphic, or in the case of photos, a description of the most important elements building the message: “Rector presenting the habilitation diploma to Dr Anna Kowalska”);
- When creating alternative texts for charts and infographics, remember to include, in addition to the title, a summary and description of the trends resulting from the graphic. Often, due to the length and level of complexity of the data being described, it is worth including the chart description in the proper body of the text, below the graphic itself;
- You do not need to use alternative descriptions for graphics that are purely decorative (in which case mark them as decorative by selecting the “Mark as decorative” option).

### **Function of adding alternative description in Microsoft Word**

- To add alternative text for graphics/charts added into a Microsoft Word document, right-click on the object and select “Format image” -> “Accessibility” -> “Alternative text”;
- or “Review “-> “Check accessibility “-> “Alternative text”;
- For graphic elements that only have a decorative function in the document, also fill in the alternative text field – instead of the content in the “Alternative text” field, tick the “Mark as decorative” option.

### **Function of adding alternative description in the Multiportal**

Multiportal has been created in accordance with the recommendations set out in WCAG 2.1. As a result, the field in which the alternative text should appear, pops up automatically when the user adds a graphic:

- Adding graphics via the media tab: once the relevant file has been uploaded/selected, a red-highlighted (mandatory) ‘alternative text’ box appears on the right-hand side of the window;

- Adding a graphic in the content of a module/news: after uploading/selecting the relevant file, a new dialogue box with image settings will appear. The alternative text should be completed in the 'alternative text' field.

All files and graphics uploaded to the Multiportal must meet accessibility requirements.

### PDF files

The accessibility of posted PDF files depends not only on how the content itself is formatted, but also on how the file was created. File scans and files where the text has been converted to curves are not available (for supporting/reading programs they will be visible as a photo/graphic).

Create PDF documents based on properly formatted DOC files (i.e. following the rules mentioned above). Only then will they be readable by blind people.

## Content creating **and editing**

When creating articles/content, it is important to bear in mind not only their readability (appropriate text formatting), but also comprehensibility of the content for the widest possible audience. **To make the texts as comprehensible as possible:**

- Remember to keep an appropriate composition of the text. Plan the entire text and divide it into logical sections (paragraphs);
- Separate paragraphs consistently using subheadings (lower level headings: H2, H3, Heading 2, Heading 3);
- Use the inverted pyramid principle: include the most important information and keywords in the headline and first paragraph, and elaborate in the following paragraphs. Additional content and potential annexes should be included in the last part of the text;

- When writing to a wide audience, remember that the language you use must be understandable – avoid jargon and limit specialist phrases;
- Avoid using abbreviations and, if it is necessary, give an explanation of the abbreviation the first time it is used;
- Try to avoid compound-complex sentences. Texts written using short sentences can be understood by a wider audience;
- Remember that every text or social media post must have a predetermined purpose that coincides with the directions set out in the Strategy of the University of Lodz. The purpose cannot be to simply provide information, e.g. ‘to inform about the conference’ or ‘to promote the event’. Instead, the purpose of a press release about a scientific conference being held at the University of Lodz may be to ‘build the image of the University of Lodz as a university focused on science and research’;
- Remember that the links you add to your content are comprehensible when, by reading their description, you are able to indicate where you will be redirected to when you click them.

## Adding content to the **Multiportal**

Multiportal, i.e. the university’s new website, is a tool subject to the WCAG 2.1 standards. Detailed information on the Multiportal can be found at [www.uni.lodz.pl/en/about-the-website](http://www.uni.lodz.pl/en/about-the-website) and aspects of the accessibility of the service are available at: [www.uni.lodz.pl/dostepnosc](http://www.uni.lodz.pl/dostepnosc).

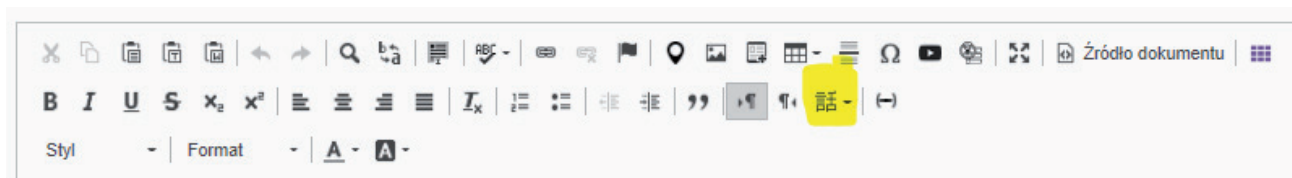
Solutions available to editors and content administrators of pages/news created within the service are appropriately tailored to meet the AA accessibility level requirements.

In practice, this means that the basic formatting rules have been programmed using the available web content management system (Central Management System – CMS). This includes typeface and type grade (font and its predefined sizes for each style – paragraph, headings), available colours, leadings and paragraph spacing.

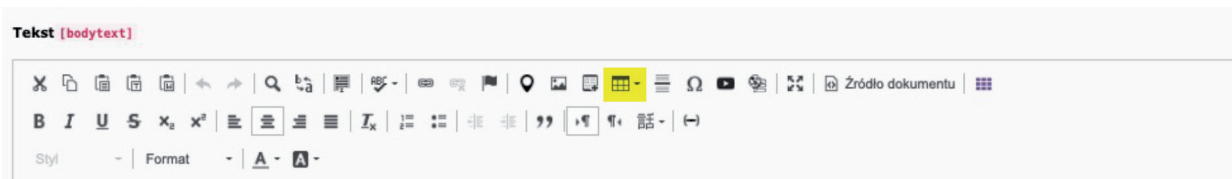
Despite the settings that are described above, editors entering data using the Multiportal must bear in mind the remaining rules for formatting the content:

- The necessity to paste in a clean, unformatted text so that the content is written in the correct typeface, which is determined for the entire site;
- The necessity to align paragraphs to the left (despite the availability of the right align or centre options, all the text should be aligned to the left margin);
- General rules for the use of differentiators in texts: a change of font colour cannot be the only differentiator for the content – it can only have a decorative role. Highlighted information should be written in a thicker typeface (bold). Only the most important information should be highlighted – too much bold in the text reduces its readability;
- Appropriate use of hyperlinks: the sub-linked content must clearly describe what the effect of clicking the link will be (do not use “click”, “read more” or “here” phrases, instead use a more appropriate form: “more information about ...(what?) can be found on XYZ.co.uk”). Also, do not paste hyperlinks on their own, without indicating their purpose.. When inserting a hyperlink, use the “Insert hyperlink” function;
- Using bullet or numerical lists by creating them by the use of the available ‘list’ function;
- Keeping the proper composition of the text: structuring it by dividing it into relevant paragraphs separated consistently by subheadings (lower level headings: H2, H3);

- Using the <lang> tag in the WYSIWYG editor (in English. “what you see is what you get” – editor for creating a website design without encoding it) when entering single words or quotations in a foreign language. Reading programs will only correctly load words in a foreign language if the specific word is chosen and the source language is selected from the list available by pressing the ‘Set language’ button in the editor;



- Describing and naming added files properly – do not add files with working names. The titles must be understandable and describe the named file;
- Using appropriate method of creating tables: tables must be created only for the content that cannot be presented any other way, they must not be used to structure the document (example: it is not permitted to create a two-column layout using a table with transparent borders and content);
- Tables must be homogeneous (same number of cells in each row and column) and they have to contain a row and/or column with a heading.
- Tables should be created using the ‘Table’ function. Select the number of columns and rows by clicking on the appropriate icon. Then, by right-clicking on the created table, select ‘Table Properties’ option. In the new dialogue box, you have to set, among other things:
  - width and height of the table (note: preferred unit of width and height for an object is a percentage of the working area, which allows the object to stay readable and responsive when the resolution (size) of the browser window changes),
  - header rows and/or columns,
  - title of the table (visible on the page),
  - summary of the table (description invisible on the page, accessible to reading programs, equivalent to alternative text for images and graphics).



It is an obligation of each editor to add alternative texts for the used graphics. What should the alternative description look like? The guidelines can be found on [page 10 of the guide](#).