

The `uantwerpendocs` classes^{*†}

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1 Introduction

This package implements the house style of Universiteit Antwerpen (version 2021) for letters, course texts, master/PhD theses, reports and slides (beamer). It also implements a class to format exams. Using these class files will make it easy for you to make and keep your course texts and theses compliant to this version and future versions of the UAntwerpen house style.

If you think (1) there's an error in compliancy w.r.t. the house style, (2) there's a feature missing in this class or theme file, or (3) there's a bug in this package, please, contact me through e-mail (walter.daems@uantwerpen.be) about the issue. I'll provide you with an answer and if (and as soon as) possible with a solution to the problem you spotted.

Do you like these class files? You're welcome to send us beer, wine, or just kind words.

2 Synopsis

The `coursetext`, `bamathesis` and `phdthesis` classes¹ are an extension of the standard \LaTeX `book` class. They are intended to be used for writing course texts and master's or PhD theses. They provides a title page that is compliant to the UAntwerpen house style, and they also typeset the rest of your document appropriately.

The `report` class is derived from the standard \LaTeX `report` class. It is intended for writing generic (e.g. research or educational) reports. The `letter` class is derived from the standard \LaTeX `letter` class. It is intended to be used for writing business letters. It is compliant to the house style and allows for using windowed envelopes of the DL format, with right-aligned window.

The `exam` class is derived from the standard \LaTeX `article` class.

^{*}This document corresponds to `uantwerpendocs` 4.2, dated 2021/10/04.

[†]Thanks to Paul Levrie for testing and proofreading.

¹For readability the class names have been abbreviated by omitting the `uantwerpen` prefix

The slides come under the form of a custom beamer theme.

The documentation of the class files for letters, course texts theses, and exams can be found in this document.
The documentation for the beamer theme is embedded in the demo/user-guide presentation `beamerthemeuantwerpenuserguide.pdf`.
Template files for all of the formats can be found below in section 5.1.

Using this package, requires the following packages:

- the `adjustbox` package
- the `babel` package
- the `background` package
- the `color` package
- the `environ` package
- the `eso-pic` package
- the `etooblox` package
- the `expl3` package
- the `fancyhdr` package
- the `geometry` package
- the `graphicx` package
- the `iftex` package
- the `ifthen` package
- the `tikz` package
- the `ulem` package
- the `xparse` package

So make sure these packages are available to your \LaTeX compiler.

You will notice that as of version 4.0 `expl3` and `xparse` are part of the game. Indeed, the `uantwerpendocs` package will be slowly refactored to $\text{\LaTeX}3$ to prepare for a package that is easier to maintain. However, the $\text{\LaTeX}3$ constructs are never exposed to the user of the classes. So: don't worry about it!

3 A note on fonts

The house style of the University of Antwerp recommends using

- Prenton RP Pro for the logos and sublogos; all the logoware is included in this package, so nothing to worry about.
- ITC Officina Sans for posters, titlepages, cards a.s.o.
This font is not a part of the \LaTeX standard fonts. It is also not provided with this package. I cannot do this without incurring legal problems (the font is not free). However, if you have a valid license, for this font, I can help you to set it up, such that you can typeset proper title pages for course texts, PhD theses and the like. Just send me an e-mail.
- Calibri for office-like documents. Just load the `\fontspec` package and issue a `\setmainfont{Calibri}` and you're all set.

Adhering to these fonts is recommended, but not enforced. Personally, I always use a Palatine serif font for my courses. I did not find any better (free) font yet. My second favorite is still the original computer modern font by Donald E. Knuth. You are reading it right now.

4 Portability

These class files should be ready to use with all common modern \LaTeX compilers (PDF \LaTeX , X \LaTeX , Lua \LaTeX , ...) from the major \TeX -distributions (TeX_{live}, MikTeX). However, using an old \LaTeX + dvips setup is likely to get you into font problems. Advice: ditch the route via dvi. If you experience other problems, please inform the author.

5 Usage

5.1 Basic Usage

Use the templates provided below. Remember to \LaTeX your source file twice.

Especially in the beamer theme some features require to run \LaTeX twice in order to get the position of some elements correct.

5.1.1 `uantwerpencoursetext` class

Use the following harness for your \LaTeX course text:

```
\documentclass[ti,a4paper]{uantwerpencoursetext}

\usepackage{<include any packages you require here>}
```

```

\title{<put your title here>}
\subtitle{<put your subtitle here>}
\author{<put your name here>}

\courseversion{<put a version identifier here>}
\versionyear{<the publication date of the course here>}

\lecturer{<person teaching the course>}
\degree{<official degree title>}
\course{<course code>}{<name of the course>}

\academicyear{<XXXX-YYYY>}

\begin{document}

    \maketitle

    % put your LaTeX code here

    \finalpage

\end{document}

```

As of version 4.0:

- the faculty is specified as an option to the `\documentclass` construct. You can find the available options in section 5.2.
- you are responsible yourself to provide the correct degree description! Maintaining the a correct list of UAntwerpen bachelor and master programs with all their specializations is beyond my ambition.

5.1.2 uantwerpenbamathesis class

Use the following harness for your L^AT_EX bachelor or master's thesis:

```

\documentclass[ti,a4paper]{uantwerpenbamathesis}

\usepackage{<include any packages you require here>}

\title{<put your title here>}
\author{<put your name here>}

% you can specify, no, one or multiple names in the categories
% supervisor (= promotor), cosupervisor (= copromotor),
% extsupervisor (= externe promotor)
\supervisor{<put supervisor's name(s) here>}{<affiliation goes here>}
\supervisor{<put supervisor's name(s) here>}{<affiliation goes here>}
\cosupervisor{<put supervisor's name(s) here>}{<affiliation goes here>}
\cosupervisor{<put supervisor's name(s) here>}{<affiliation goes here>}

```

```

\extsupervisor{<put supervisor's name(s) here>}{<affiliation goes here>}
\extsupervisor{<put supervisor's name(s) here>}{<affiliation goes here>}

% classmarker
\academicyear{<XXXX-YYYY>}

\begin{document}

    \maketitle

    % put your LaTeX code here

    \finalpage

\end{document}

```

The available faculty options are listed in a table on page 8.

5.1.3 uantwerpenletter class

Use the following harness for your L^AT_EX letter:

```

\documentclass[a4paper,ti]{uantwerpenletter}

% setup fonts according to your specific TeX compiler setup

\usepackage{<include any packages you require here>}

% \logo{< >} only specify if you want to use your unit's logo

\sender{<put your name here>}{<put your title/role here>}
\unit{<put your unit here>}
\address{<put your multi-line address here>}
\email{<user name>}{<domain name>}
\phone{<put your phone number here, start with +32>}
\fax{<put your fax number here, start with +32>}
\mobile{<put your mobile number here, start with +32>}
\returnaddress{<put your single-line return address here>}

\to{<name of the addressee goes here>}
\toorganization{<name of the organization goes here>}
\toaddress{<multi-line address of the addressee goes here>}

\date{<specify date - otherwise today>}
\subject{<specify subject>}

\begin{document}

    \maketitle % generates top of the letter

    \opening{Dear <name>}

```

```

<write your letter here>

\closing{Kind regards,}

\carboncopy{<put CC people here>}
\enclosed{<put reference to enclosed documents here>}

\end{document}

```

The available faculty options are listed in a table on page 8. You may use lists in the `\carboncopy` and `\enclosed` commands. The spacing will be compact.

5.1.4 uantwerpenphdthesis class

```

\documentclass[ti,10pt,twoside,openright,filled]{uantwerpenphdthesis}

You may want to use common fonts
\usepackage{<include any additional packages you require here>}

\title{<put your title here>}
\author{<put your name here>}
\affiliation{<put your affiliation here>}
\address{<put your contact details here>}

\supervisor{<put supervisor's name here>}{<affiliation goes here>}
\supervisor{<put supervisor's name here>}{<affiliation goes here>}

\jurychairman{<put chairman's name here>}{<affiliation goes here>}

\jurymember{<put member's name here>}{<affiliation goes here>}
\jurymember{<put member's name here>}{<affiliation goes here>}
\jurymember{<put member's name here>}{<affiliation goes here>}

\degree{<put official degree name here>}
\defenselocation{<put location of defense here>}
\defensedate{<put defense year here>}
\titlepageimage{<set file name of title page image here>}

\isbn{<put ISBN13 number here>}
\depot{<put Depot number here>}

\begin{document}

\maketitle
\frontmatter
\tableofcontents
\mainmatter

% write your PhD text here

\appendix

```

```
% write appendix material here

\makefinalpage

\end{document}
```

The available faculty options are listed in a table on page 8.

5.1.5 uantwerpenreport class

```
\documentclass[ti,10pt,twoside,openright,filled]{uantwerpenreport}

You may want to use common fonts
\usepackage{<include any additional packages you require here>}

\title{<put your title here>}
\author{<put your name here>}
\affiliation{<put your affiliation here>}
\address{<put your contact details here>}

\titlepageimage{<set file name of title page image here>}

\begin{document}

\maketitle
\frontmatter
\tableofcontents
\mainmatter

% write your PhD text here

\appendix

% write appendix material here

\makefinalpage

\end{document}
```

The available faculty options are listed in a table on page 8.

5.1.6 uantwerpenbeamer theme

```
\documentclass[aspectratio=1610]{beamer}
% options that select the proper faculty in the beamertheme:
% be, fbd, ggw, lw, ow, re, sw, ti, we, iob (no option = mother
% theme)
\usetheme[ti]{uantwerpen}
\usepackage[dutch]{babel}
```

```

\title{This is your title}
\subtitle{This is your subtitle - omit if you don't need this}
\date{This is the date - will be today if omitted}
\author{This is your name - omit if you don't need this}

\begin{document}

\begin{frame}[negativefill]
  \maketitle
\end{frame}

\begin{frame}
  {Advice}
  {\ldots is cheap}
  Search for the \texttt{beamerthemeuantwerpenuserguide.pdf} for
  more info (or the corresponding \texttt{.tex} file!
\end{frame}

\end{document}

```

5.2 The class options explained

The classes have several options. They are listed below. After every option, it has been indicated to which class the option applies (between square brackets, without prefix uantwerpen).

xx(x) [letter / coursetext / bamathesis / phdthesis / report / beamertheme]

Option	Faculty
be	Faculty of Business and Economics Faculteit Bedrijfswetenschappen en Economie
fbd	Faculty of Pharmaceutical, Biomedical and Veterinary Sciences Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen
ggw	Faculty of Medicine and Health Sciences Faculteit Geneeskunde en Gezondheidswetenschappen
lw	Faculty of Arts Faculteit Letteren en Wijsbegeerte
ow	Faculty of Design Sciences Faculteit Ontwerpwetenschappen
re	Faculty of Law Faculteit Rechten
sw	Faculty of Social Sciences Faculteit Sociale Wetenschappen
ti	Faculty of Applied Engineering Faculteit Toegepaste Ingenieurswetenschappen
we	Faculty of Science Faculteit Wetenschappen
iob	Institute of Development Policy Instituut voor Ontwikkelingsbeleid- en beheer

cameraready [phdthesis/coursetext]
For the **phdthesis** class, this option forces the book format to be printed on A4 with bleed space. This accomodates what your printshop requires you to provide as a camera-ready copy.

For the **coursetext** class, this options removes the colored areas and the logo from the titlepage (and removes the finalpage altogether) to allow for universitas to print the text of your titlepage on a standard sheet that contains these colored areas and the logo (pre-printed).

copyright [coursetext]
This option forces printing a watermark on every page. For the paper version of your document, this is inappropriate, but for any e-copy you make available, this may be appropriate;

examiner [exam]
This option allows to set the exam class in examiner mode, mentioning the examiner mode on every page (as regular text in the header and also in a watermark) to make sure you never hand out that copy to students and suppressing the fillout pages.

filled [letter / coursetext / bamathesis / phdthesis / report]
This option causes the text to be filled (simultaneous left and right alignment). Though this setting is not recommended, it is provided because the default **\raggedright** cannot be undone. The **filled** option prevents the **\raggedright** from being issued. However, if you care about the typographic readability of your text, you shouldn't use this option.

Common sets of options depend on the purpose:

- to make a text ready for electronic distribution: `a4paper`, `copyright`.
- to make a camera-ready text (for printing): `a4paper`
- to make a camera-ready coursetext (for printing at universitas): `a4paper,cameraready`
- to make a letter: no options (filling a letter is discouraged)
- to make an exam: no options (filling an exam is discouraged)
- to make a PhD text: `twoside`, `openright` and (optionally) `filled`
- to make a camera-ready PhD text: `twoside`, `openright`, `cameraready` and (optionally) `filled`
- to make a report: `twoside`, `openright` and (optionally) `filled`

5.3 The macros explained

5.3.1 Macros for the coursetext, bamathesis, phdthesis classes

<code>\academicyear</code>	[coursetext / bamathesis] (mandatory) Use this macro to specify the academic year in full, i.e. in the form XXXX-YYYY.
<code>\author</code>	[coursetext / bamathesis / phdthesis / report] (mandatory) This macro sets the author of the document. It also sets the <code>pdfauthor</code> tag of the hyperref package (if it is loaded), so that the PDF-document meta-information is correct.
<code>\copyrightnotices</code>	[coursetext / report] (optional) Use this macro to specify additional copyright notice messages to appear in the copyright notice on the bottom of page 2 of your course text.
<code>\course</code>	[coursetext] (mandatory) Code (first argument) and name (second argument) of the curriculum course this coursematerial or exam belongs to. The code should be of the form: TNNNFFFAAA, with:

Code	Explanation
T	a number indicating the type of programme (1 for Bachelor courses, 2 for Master courses , 5 for specific courses of preparatory programmes)
NNN	a number assigned by the Faculty's administration
FFF	the acronym of your Faculty, e.g., FTI
AAA	an alphanumeric code assigned by the Faculty's administration

An example of such a code: 1001FTIWIS, for the first-semester mathematics course of the Faculty of Applied Engineering.

<code>\courseversion</code>	[coursetext] (optional) This macro indicates which version of the course this is.
<code>\defensedate</code>	[phdthesis] (mandatory)

Only the year should be mentioned.

<code>\defenselocation</code>	[phdthesis] (optional) Location of the defense. Defaults to “Antwerpen”.
<code>\diploma</code>	[bamathesis] (discontinued) This macro is no longer used. Use <code>\degree{}</code> instead.
<code>\lecturer</code>	[coursetext] (mandatory) You can add one or more lecturers to the course notes (in Dutch: titularis). If there are multiple persons, please, use the macro multiple times.
<code>\phddegree</code>	[phdthesis] (discontinued) This macro is no longer used. Use <code>\degree{}</code> instead.
<code>\degree</code>	[bamathesis,phdthesis,coursetext] (mandatory) This is the official degree name (in the appropriate language, possibly mixed “dutch (english)”). Specify the official title of your diploma. This must be the official title. For bachelor and master programmes in Dutch, it must be the Dutch title. For programmes in English it may be the English title. For PhD degrees, language constraints are less strict. Consult https://www.hogeronderwijsregister.be for correct bachelor and master degree titles. Consult the Doctoral bylaws of the university for correct PhD degree titles. Students of FTI and FWET, can use the <code>\bamadegree</code> command instead.
<code>\bamadoctype</code>	[bamadocument] (mandatory) This allows to set the nature of the thesis. The proper values of the argument are listed below. Don’t use this macro when you are using the <code>\bamadegree</code> macro (see below), unless you want to change the document type to ‘project’.

This data comes from uantwerpendocs-doctype.data

argument	
nl-ba	Bachelorproef
nl-ma	Masterproef
nl-pr	Projectverslag
en-ba	Bachelor’s thesis
en-ma	Master’s thesis
en-pr	Project report

<code>\bamadegree</code>	[bamathesis] (mandatory) This allows to specify the official degree through an abbreviation. Using this abbreviation
--------------------------	---

This data comes from uantwerpendocs-degree.data

argument	degree
ti-nl-ba-bk	Bachelor of Science in de industriële wetenschappen: bouwkunde
ti-nl-ba-ch	Bachelor of Science in de industriële wetenschappen: chemie
ti-nl-ba-em	Bachelor of Science in de industriële wetenschappen: elektromechanica
ti-nl-ba-ei	Bachelor of Science in de industriële wetenschappen: elektronica-ICT
ti-nl-ma-bk	Master of Science in de industriële wetenschappen: bouwkunde
ti-nl-ma-bch	Master of Science in de industriële wetenschappen: bio-chemie
ti-nl-ma-ch	Master of Science in de industriële wetenschappen: chemie
ti-nl-ma-em	Master of Science in de industriële wetenschappen: elektromechanica
ti-nl-ma-ei	Master of Science in de industriële wetenschappen: elektronica-ICT
ti-en-ma-ei	Master of Science in Electronics and ICT Engineering Technology
ti-nl-eduma-wtstem	Educatieve master of Science in de wetenschappen en technologie: STEM
we-nl-eduma-wtstem	Educatieve master of Science in de wetenschappen en technologie: STEM
we-nl-eduma-wtbchbt	Educatieve master of Science in de wetenschappen en technologie: biochemie en biotechnologie
we-nl-eduma-wtbio	Educatieve master of Science in de wetenschappen en technologie: biologie
we-nl-eduma-wtch	Educatieve master of Science in de wetenschappen en technologie: chemie
we-nl-eduma-wtfy	Educatieve master of Science in de wetenschappen en technologie: fysica
we-nl-eduma-wtinf	Educatieve master of Science in de wetenschappen en technologie: informatica
we-nl-eduma-wtwi	Educatieve master of Science in de wetenschappen en technologie: wiskunde
we-nl-ba-bircg	Bachelor of Science in de bio-ingenieurswetenschappen: cel- en genbiotechnologie
we-nl-ba-birvt	Bachelor of Science in de bio-ingenieurswetenschappen: chemie en voedingstechnologie
we-nl-ba-birlb	Bachelor of Science in de bio-ingenieurswetenschappen: land- en bosbeheer
we-nl-ba-birmt	Bachelor of Science in de bio-ingenieurswetenschappen: milieutechnologie

we-nl-ba-bio	Bachelor of Science in de biologie
we-nl-ma-bioeg	Master of Science in de biologie: evolutie en gedragsbiologie
we-en-ma-biocr	Master of Science in biology: biodiversity, conservation and restoration
we-en-ma-biogcb	Master of Science in biology: global change biology
we-en-ma-biomb	Master of Science in molecular biology
we-nl-ba-ch	Bachelor of Science in de chemie
we-en-ma-ch	Master of Science in chemistry
we-nl-ba-inf	Bachelor of Science in de informatica
we-en-ma-infcn	Master of Science in computer science: computer networks
we-en-ma-infdsai	Master of Science in computer science: data science and artificial intelligence
we-en-ma-infse	Master of Science in computer science: software engineering
we-nl-ma-infcn	Master of Science in de informatica: computernetwerken
we-nl-ma-infdsai	Master of Science in de informatica: data science en artificiële intelligentie
we-nl-ma-infse	Master of Science in de informatica: software engineering
we-nl-ba-fy	Bachelor of Science in de fysica
we-nl-ma-fy	Master of Science in de fysica
we-en-ma-fy	Master of Science in physics
we-nl-ba-wi	Master of Science in wiskunde
we-nl-ma-wifw	Master of Science in wiskunde: fundamentele wiskunde
we-nl-ma-wifw	Master of Science in wiskunde: financiële en toegepaste wiskunde

<code>\programme</code>	[coursetext] (discontinued)
<code>\publisher</code>	This macro is no longer used. Use <code>\degree{}</code> instead. [coursetext] (mandatory) This macro sets the publisher information of the document. It is printed on the front page. It defaults to the repographic service of campus Groenenborger, one of the standard printing services of Universiteit Antwerpen. Separate the different fields (name, address, a.s.o) using a pipe symbol.
<code>\publishercode</code>	[coursetext] (mandatory) This macro sets the publisher code of the document. It is printed on the front page. This is code that the publisher uses for its internal administration. It may be a proprietary code, or an ISBN number.
<code>\subtitle</code>	[coursetext / phdthesis / report] (optional) This macro sets the title of the document. You may use this <ul style="list-style-type: none"> • to further clarify the title

- to indicate the nature of this document

The latter is to be considered when you want to provide multiple documents as parts of the full course text (e.g., Course Notes, Formula Collection, Exercise Book, Solution Book). This macro also sets the `subject` tag of the `hyperref` package (if it is loaded), so that the PDF-document meta-information is correct.

<code>\supervisor</code>	[bamathesis / phdthesis] (mandatory) Specifies the person(s) that promote(s)/supervise(s) the thesis. Please, use the macro multiple times if needed.
<code>\title</code>	[coursetext / bamathesis / phdthesis / report] (mandatory) This macro sets the title of the document. It also sets the <code>pdftitle</code> tag of the <code>hyperref</code> package (if it is loaded), so that the PDF-document meta-information is correct.
<code>\titlepageimage</code>	[phdthesis / report] (optional) This sets the filename of the central image on the title page to appear clipped within the curves. For PhD theses this is highly advised. For course texts, this is optional. If the image is not set, a flat colored area will appear. This is part of the house style.
<code>\versionyear</code>	[coursetext / report] (mandatory) This is to be the year in which you published the current version of the course in the form YYYY.

5.3.2 Macros for the letter class

<code>\address</code>	[letter] (mandatory) Address of the sending unit (or faculty). This can be different from the return address. Newlines are allowed and encouraged.
<code>\carboncopy</code>	[letter] (optional) List of persons receiving a copy of this letter. Format at will.
<code>\closing</code>	[letter] (mandatory) Closing clause of the letter. E.g. 'Best regards,'.
<code>\date</code>	[letter] (optional) Date of the letter. If not specified today's date (at the time of running <code>L^AT_EX</code>) will be used.
<code>\email</code>	[letter] (optional) E-mail address of the sending person, or the administrative person tracking the letter. This must definitely be someone that can answer questions related to this letter.

- first argument: user name
- second argument: domain name

<code>\enclosed</code>	[letter] (optional) List of enclosed documents. Format at will.
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<code>\fax</code>	[letter] (optional) Probably facsimile is not used anymore, but anyway: fax number of the sending person. See also <code>\email</code> .
<code>\logo</code>	[letter] (optional) file name of an alternative logo to use. The file name must be the name of a file in the search path of type PDF. If this macro is not used, The default logo of the university or your faculty/institute will be used.
<code>\mobile</code>	[letter] (optional) Mobile phone number of the sending person. See also <code>\email</code> .
<code>\opening</code>	[letter] (mandatory) Opening address of the letter. E.g. 'Dear X,'.
<code>\phone</code>	[letter] (optional) Phone number of the sending person. See also <code>\email</code> .
<code>\returnaddress</code>	[letter] (mandatory) This is a short return address (listed in small font on top of the destination address (such that it is visible in a windowed envelope (European format))). It should fit on a single line. Typically we list an acronym for the unit, a room number, a campus name and address. The goal is to get the undelivered letter back to the person that can take action accordingly.
<code>\sender</code>	[letter] (mandatory) Description of the person writing the letter. <ul style="list-style-type: none"> • first argument: name of the person writing the letter • second argument: title / role of the person <p>Newlines are not allowed in the arguments.</p>
<code>\signature</code>	[letter] (optional) Add a signature (in between the closing statement of the letter and the sender's name. This might be a text message or a picture of your signature.
<code>\subject</code>	[letter] (mandatory) Short descriptive subject that describes the contents of the letter.
<code>\to</code>	[letter] (mandatory) Name of the addressee. Newlines are allowed. Preferably name and role are split over two lines.
<code>\toaddress</code>	[letter] (mandatory) Address of the addressee. Newlines are allowed. The address should fit on max. 3 lines.
<code>\toorganization</code>	[letter] (optional) Name of the organization that employs the addressee.
<code>\unit</code>	[letter] (optional) Name of the unit to which the person belongs. This can be a research group, a laboratory, an administrative division, etc. Newlines are allowed.

5.3.3 Macros for the exam class

<code>\author</code>	[exam] (mandatory) The author of the exam (may be multiple authors, separated by commas). On the title page, these will be labeled as 'Professor(s) - Titularis(sen)'.
<code>\academicyear</code>	[exam] (mandatory) Use this macro to specify the academic year in full, i.e. in the form XXXX-YYYY.
<code>\course</code>	[exam] (mandatory) see description of <code>\course</code> macro on page 10.
<code>\degree</code>	[exam] (mandatory) This is the official degree name (in the appropriate language, possibly mixed "dutch (english)"). Specify the official title of your diploma. This must be the official title. For bachelor and master programmes in Dutch, it must be the Dutch title. For programmes in English it may be the English title. For PhD degrees, language constraints are less strict. Consult https://www.hogeronderwijsregister.be for correct bachelor and master degree titles. Consult the Doctoral bylaws of the university for correct PhD degree titles.
<code>\examdate</code>	specifies the date of the exam. We recommend the YYYY-MM-DD format, but you are free to choose your own coding scheme for dates. We advise against using UNIX epoch time, to avoid problems in the first semester exams in 2038.
<code>\examgroupnumber</code>	[exam] mentions the group number (may be empty)
<code>\examlength</code>	specifies the length of the exam in a unit of time, e.g. '4h'
<code>\exampart</code>	[exam] (mandatory) Description of the part of the course the exam covers. Often the evaluation of a course consists of multiple evaluation elements (e.g. a written exam, a portfolio defense and lab reports). Using this macro you can indicate the part this exam covers. E.g. it could be 'Written Exam' (to distinguish from the other parts 'portfolio defense' and 'lab reports').
<code>\extrainfo</code>	specifies the extra information that appears on the back of the title page, regarding the materials that can be used during the examination and cautioning the students not to commit fraude. You can specify an optional first argument 'firstpage', such that your extra info starts on the first page, below the title block. In that case the extra info will also not be terminated with a <code>clearpage</code> (as we assume you want to conserve space).
<code>\lecturer</code>	[exam] (mandatory) You can add one or more lecturers to the course notes (in Dutch: titularis). If there are multiple persons, please, use the macro multiple times.
<code>\programme</code>	[exam] (discontinued) This macro is no longer used. Use <code>\degree{}</code> instead.
<code>\room</code>	specifies the rooms in which the exam will take place. This is useless info for the student, but may be of convenience for you as author or supervisor of the exam. Use UAntwerpen standard room designators, e.g. 'G.U.025' for room number 025,

on the Groenenborgercampus in the U-building. If your exam is taken in multiple rooms, just specify multiple `\room{}` commands.

- `\studentnr` specifies the exam copy number. This will appear on every page of the exam, easing the reassembly of pages that do not contain any name. Moreover, it allows for blind correction as the student only writes his name on the front page.
- `\tend` specifies the end time of the exam in a format identical to the one chosen for `\tstart`.
- `\tstart` specifies the start time of the exam, preferable in the format 'HHhMM', e.g. '08h30'.

5.4 Examples

5.4.1 `uantwerpencoursetext`

```
<*ct-example>
\documentclass[ti,a4paper,11pt,oneside,openright,cameraready]{uantwerpencoursetext}

\usepackage[english,dutch]{babel}
\usepackage{kantlipsum} % this is just for some dummy text, please remove
\title{Z'agen, zoeken en zuchten}
\subtitle{Cursusnota's}
\author{Walter Daems en Paul Levrie}

\courseversion{1.3}
\versionyear{2021}

\lecturer{Zoltan Zo\"ekers}
\lecturer{Siana Sigh}
\lecturer{Zeger de Z'ager}

\degree{Master of Science in de industri\"ele wetenschappen:
elektronica-ICT}
\course{2023FTIZZ}{5-Zoekmachines in een zaagperspectief}
\course{2045FTIIII}{6-Zaagmachines in \"e\"en zuchtperspectief}

\academicyear{2021-2022}

\publisher{Universitas Cursusdienst |
Prinsesstraat 16 |
2000 Antwerpen |
T +32 3 233 23 73 |
E info@cursusdienst.be}

\publishercode{C11111102}

\copyrightnotices{
The graphics in this document have been typeset using \texttt{TikZ}.\
This document has been \TeX-ed on a GNU/Linux workstation.
}
\begin{document}
```

```

\maketitle

\frontmatter

\tableofcontents

\mainmatter
\chapter*{Inleiding}

\kant[1]
\chapter{Onzin voor dummies}

\section{Het gebeuren}
\kant[2]
\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}

\kant[3]
\section{En waartoe het geleid heeft}

\kant[4]

\subsection{Herhaling}

\kant[5]

\subsection{Begint vervelend te worden}

\kant[6]
\newpage

\subsection{Begint echt vervelend te worden}

\kant[7-10]

\chapter{Besluit}

\appendix

\chapter{Symbolen}
\chapter{Romeinse sprekers}
\chapter{Referentielijst}

\makefinalpage

\end{document}
</ct-example>

```

5.4.2 uantwerpenbamathesis

```

<*bmt-example>
\documentclass[ti,twoside,openright,a4paper,11pt]{uantwerpenbamatthesis}
  1. specify your faculty in the options above! This will trigger the
      correct color scheme and logos.
      FTI = ti
      FWET = we
  2. for two-sided theses, specify 'twoside' and 'openright' as options
      for one-sided theses, specify 'oneside' and 'openany' as options

\usepackage[dutch]{babel} % or english if your text is in English
\usepackage{kantlipsum} % this is just for some dummy text, please remove

\usepackage[backref,hyperindex=true,pagebackref=true]{hyperref}
      % New: you must load the hyperref package
      % yourself! This allows you to put it in the
      % correct order with the other packages you load!

\usepackage{mathptmx}
\iftutex
\usepackage{fontspec}
\setmainfont{Calibri} % comment this line out if you want computer
                      % modern as main font, or feel free to select
                      % any other font
\setsansfont{Calibri}
\usepackage{sansmathaccent}
\fi

\bamadegree{ti-nl-ma-ei}

\title{Minimax optimisatie voor performantie-
ruimtemodellering} % either don't split titles, or do so with hyphen
                  % and a newline
\subtitle{Deze subtitel mag je weglaten}
\author{Bert Bibber}

you can specify multiple supervisors, cosupervisors and external supervisors
in Dutch: promotoren, copromotoren (dagelijkse begeleiders) en bedrijfspromotoren
\supervisor{prof. dr. ir. P. Kumulus}{UAntwerpen}
\supervisor{prof. dr. ir. E. Snuffel}{UAntwerpen}
\cosupervisor{ing. P. Pienter}{Cosys, UAntwerpen}
\extsupervisor{prof. dr. H. Warwinkel}{TNT-Bang, N.V.}

keep the spaces around the dash!
\academicyear{2021 - 2022}

you can specify a company logo
\companylogo{\includegraphics[width=4.5cm,height=2.5cm,keepaspectratio]{companylogo.jpg}}

\begin{document}

\maketitle

\frontmatter

```

```

\tableofcontents

\mainmatter
\chapter*{Inleiding}

\insettext{Bene vixit qui bene latuit!}

\kant[1]

\chapter{Onderzoeksvraag}

\insetquote{As any dedicated reader can clearly see, the Ideal of
  practical reason is a representation of
  as far as I know, the things themselves, a vast overexaggeration.}

\section{Het gebeuren}

\kant[2]

\begin{equation}
  e^{-j\pi} + 1 = 0
\end{equation}

\kant[3]

\kant[4]

\kant[5]

\kant[6]

\kant[7]

\kant[8]

\kant[9]

\kant[10]


\chapter{Literatuurstudie}

\chapter{Theoretische achtergrond}

\chapter{Eigen realisatie}

\chapter{Besluit}

\appendix

\chapter{Symbolen}
\chapter{Referentielijst}

\end{document}

```

</bmt-example>

5.4.3 uantwerpenphdthesis

Dutch

```
<*pt-example1>
\documentclass[ti,10pt,twoside,openright,filled]{uantwerpenphdthesis}

  You may want to use common fonts
\usepackage{mathptmx}
\iftutex
\usepackage{fontspec}
\setmainfont{Calibri}
\setsansfont{Calibri}
\else
\usepackage{cmbright}
\fi

\usepackage[dutch]{babel} % or dutch if your text is in Dutch
\usepackage{kantlipsum} % this is just for some dummy text, please remove

\usepackage[backref,hyperindex=true,pagebackref=true]{hyperref}
% New: you must load the hyperref package
% yourself! This allows you to put it in the
% correct order with the other packages you load!

\title{Harmonische Signaalanalyse\met behulp van Lineaire
  Operatoren}
\subtitle{Waarom moeten titels van doctoraatsthesisen toch altijd
  lang en onverstaanbaar zijn?}
\author{Ing. Theofiel Hoekaff}
\affiliation{Universiteit Antwerpen\\
  Faculteit Toegepaste Ingenieurswetenschappen\\
  Co-design of Cyber-Physical Systems (Cosys-Lab)}
\address{Groenenborgerlaan 171, 2020 Antwerpen, Belgi\`e\\
  M: theofiel.hoekaff@uantwerpen.be\\
  T: +32 265 00 00
}

\supervisor{prof. dr. W. Vlaams}{Universiteit Antwerpen, Belgi\`e}
\supervisor{prof. dr. J. Stekker}{Universiteit Antwerpen, Belgi\`e}

\jurychairman{prof. dr. P. Dalinckx}{Universiteit Antwerpen, Belgi\`e}

\jurymember{prof. dr. J. Dezerooder}{Universiteit Antwerpen, Belgi\`e}
\jurymember{prof. dr. P. De Tollenaere}{Flanders Make, Belgi\`e}
\jurymember{prof. dr. M. Byr}{IMEC, Nederland}

\degree{doctor in de toegepaste ingenieurswetenschappen}
\defenselocation{Antwerpen}
\defensedate{2021}
```

```

\titlepageimage{Images/uantwerpen-keyboard.jpg}

\isbn{987-90-57285-34-7} % don't specify this if you don't want one
\depot{D/2021/12.293/03} % idem

\begin{document}

\maketitle

\frontmatter

\tableofcontents

\mainmatter
\chapter*{Inleiding}

\kant[1]

\chapter{Onderzoeksvraag}

\section{Het gegeven}

\kant[2]

\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}

\kant[3-17]

\chapter{Literatuurstudie}

\kant[18-19]

\chapter{Theoretische achtergrond}

\kant[20-21]

\chapter{Eigen realisatie}

\kant[22-24]

\chapter{Besluit}

\kant[25]

\appendix
\chapter{Symbolen}

\chapter{Publicaties}
Put your bibliography here using BibTeX

\makefinalpage

```

```
\end{document}
</pt-example1>
```

English

```
<*pt-example2>
\documentclass[ti,10pt,twoside,openright,filled,cameraready]{uantwerpenphdthesis}

use some fancy font
\usepackage{newpxtext}
\usepackage{newpxmath}

\usepackage[english]{babel} % or dutch if your text is in Dutch
\usepackage{kantlipsum} % this is just for some dummy text, please remove

\usepackage[backref,hyperindex=true,pagebackref=true]{hyperref}
% New: you must load the hyperref package
% yourself! This allows you to put it in the
% correct order with the other packages you load!

\title{Harmonic Signal analysis \\\based on Linear Operators}
\subtitle{How did Mindy linearly kill Mork's IC signal analyzer?}
\author{Ing. Theodore Edgeoff}
\affiliation{University of Antwerp\\
  Faculty of Applied Engineering\\
  Cosys-Lab}
\address{Groenenborgerlaan 171, 2020 Antwerpen, Belgi\\"e\\
  M: theofiel.hoekaff@uantwerpen.be\\
  T: +32 265 00 00
}

\supervisor{prof. dr. W. Vlaams}{University of Antwerp, Belgium}
\supervisor{prof. dr. J. Stekker}{University of Antwerp, Belgium}

\jurychairman{prof. dr. P. Dalinckx}{University of Antwerp, Belgium}

\jurymember{prof. dr. J. Dezeroder}{University of Antwerp, Belgium}
\jurymember{prof. dr. P. De Tollenaere}{Flanders Make, Belgium}
\jurymember{prof. dr. M. Byr}{IMEC, The Netherlands}

\degree{doctor in applied engineering}
\defenselocation{Antwerpen}
\defensedate{2021}
\titlepageimage{Images/uantwerpen-keyboard.jpg}

\isbn{987-90-57285-34-7}
\depot{D/2021/12.293/03}

\begin{document}

\maketitle
```

```

\frontmatter

\tableofcontents

\mainmatter
\chapter*{Introduction}

\kant[1]

\chapter{Research question}

\section{The datum}

\kant[2]

\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}

\kant[3-17]

\chapter{Literature review}

\kant[18-19]

\chapter{Theoretical background}

\kant[20-21]

\chapter{Technical results}

\kant[22-24]

\chapter{Conclusion}

\kant[25]

\appendix

\chapter{Symbols}

Put your bibliography here using BibTeX

\makefinalpage

\end{document}
</pt-example2>

```

5.4.4 uantwerpenreport

```

<*rp-example>
\documentclass[10pt,twoside,openright,filled]{uantwerpenreport}

```



```

    You may want to use common fonts
\usepackage{mathptmx}
\iftutex
\usepackage{fontspec}
\setmainfont{Calibri}
\setsansfont{Calibri}
\usepackage{sansmathaccent}
\else
\usepackage{cmbright}
\fi

\usepackage[dutch]{babel} % or dutch if your text is in Dutch
\usepackage{kantlipsum} % this is just for some dummy text, please remove

\usepackage[backref,hyperindex=true,pagebackref=true]{hyperref}
% New: you must load the hyperref package
% yourself! This allows you to put it in the
% correct order with the other packages you load!

\title{De toepassing van roomijs-derivaten in beton}
\subtitle{Het belang van een smaakvolle architectuur}
\author{Ing. Jan Bouwblauw}
\extra{Onderzoeksrapport}
\affiliation{Universiteit Antwerpen | Building Research Group}
\address{Groenenborgerlaan 171, 2020 Antwerpen, België"e\\
M: jan.bouwblauw@uantwerpen.be\\
T: +32 265 00 00
}

\versionyear{2021}

\titlepageimage{Images/uantwerpen-keyboard.jpg}

\begin{document}

\maketitle

\frontmatter

\tableofcontents

\mainmatter
\chapter*{Inleiding}

\kant[1]

\chapter{Smaken en smaakpapillen}

\section{Het gegeven}

\kant[2]

\begin{equation}

```

```

    e^{-j\pi} + 1 = 0
\end{equation}

\kant[3-17]

\chapter{Experimentele setup}

\kant[18-19]

\chapter{Resulaten}

\kant[20-21]

\chapter{Conclusie}

\kant[22-24]

\chapter{Advies}

\kant[25]

\appendix
\chapter{Symbolen}

\chapter{Publicaties}
    Put your bibliography here using BibTeX

\makefinalpage

\end{document}
</rp-example>

```

5.4.5 uantwerpenletter

Plain example

```

<*le-example>
\documentclass[ti,a4paper]{uantwerpenletter}

% As a good UAntwerpen citizen, you would use the calibri font.
% As this only works for XeLaTeX or LuaLaTeX, we chose to include
% cmbright in any other case.
\iftutex
\usepackage{fontspec}
\setmainfont{Calibri}
\else
\usepackage{cmbright}
\fi

\usepackage[english]{babel}
\usepackage{kantlipsum} % this is just for some dummy text, please remove

```

```

\sender{prof. Walter Daems}{Senior Lecturer}
\unit{Cosys-Lab}
\address{
  Campus Groenenborger\\
  Groenenborgerlaan 171\\
  B-2020 Antwerpen\\
  BELGIUM}
\email{walter.daems}@uantwerpen.be}
\phone{+32 3 265 98 43}
\mobile{+32 499 355 115}
\returnaddress{FTI - U.301 -- Groenenborgerlaan 171, 2020 Antwerpen, BELGIUM}

\to{prof. B. Bonette}
\toorganization{Mumford University}
\toaddress{
  450 Morning Mall\\
  Mumford, DX 94305-2004\\
  USA}

\date{January 3, 2016}
\subject{Congratulations for online video lectures}

\begin{document}
  \maketitle

  \opening{Dear prof. Bonette,}

  I'd like to congratulate you and the other professors of your
  university on the very instructive video lectures
  provided by your University. They are valued very
  highly.

  You inspired many a professor at our university to provide more
  technical content beyond classical paper courses.
  Based on your inspiring lectures, some students desire to candidate
  themselves for taking an internship at your university. You can find
  their details enclosed.

  Below, you can find a few more paragraphs to illustrate that this
  class can generate multipage letters.

  \kant[1-3]

  \closing{Kind regards,}
  % you might want to insert a signature picture or text:
  % \signature{\includegraphics{signature.jpg}}
  \carboncopy{prof. S. Mariotte, Mumford University}
  \enclosed{
    \begin{enumerate}
      \item list of course numbers that are most frequently viewed at
        our university (1pp)
      \item a list of students desiring to take an internship at
        Mumford University (2pp)
    \end{enumerate}
  }

```

```

    }
\end{document}
</le-example>

```

Example with configuration file

Probably, one has to write many letters. The sender details will be most certainly valid for many an occasion. Therefore, you might want to consider putting this default setup in a configuration file, e.g. `uantwerpenletter.cfg`:

```

<*le-cfg>
% configuration file for uantwerpenletter class
\iftutex
\usepackage{fontspec}
\setmainfont{Calibri}
\else
\usepackage{cmbright}
\fi

\sender{prof. Walter Daems}{Senior Lecturer}
\unit{Cosys-Lab}
\address{
  Campus Groenenborger\\
  Groenenborgerlaan 171\\
  B-2020 Antwerpen\\
  BELGIUM}
\email{walter.daems}{uantwerpen.be}
\phone{+32 3 265 98 43}
\mobile{+32 499 355 115}
\returnaddress{FTI - U.301 -- Groenenborgerlaan 171, 2020 Antwerpen, BELGIUM}
</le-cfg>

```

The file can then be loaded in the preamble of your letter:

```
\input{uantwerpenletter.cfg}
```

After loading this configuration file, you may override some elements if this is appropriate.

You may also consider using multiple configuration files in case you have multiple roles in the university. Just make sure they are on your \LaTeX search path.

5.4.6 uantwerpenexam

Below you can find two examples:

- A single column layout (single language) exam
- A double column layout (English-Dutch) exam

If you require more language combinations, ask the author to implement this.

Single column

```
<*ex-example1>
\documentclass[ti,a4paper,10pt]{uantwerpenexam}
\usepackage{newpxtext} % demonstration of some fine font packages
\usepackage{newpxmath}
\usepackage{enumitem}
\usepackage[dutch]{babel} % last language loaded will
                           % determine logo version (change to
                           % [dutch] for a monolingual version)

\course{1876FTIDUM}{5-Bistrologie}
\author{Walter Daems}      % can be omitted if 'lecturers' are sufficient
\lecturer{Walter Daems}
\degree{Bachelor of Science in de industri\ "ele wetenschappen - elektronica-
ICT}
\academicyear{2017-2018}
\exampart{Schriftelijk Examen}
\examgroupnumber{1 (eerste examenkans-inhaal)}
\examdate{2018-01-29}
\examlength{4h}
\tstart{08h30}
\tend{12h30}
\room{G.U.025}
\extrainfo[firstpage]{
  Belangrijke informatie:\\par
  Het volledige Onderwijs- en Examenreglement (OER) is van toepassing
  op dit examen.
  Toch wil ik vooraf nog een aantal regels duidelijk stellen:
  \begin{enumerate}
  \item Mogen op je tafeltje aanwezig zijn:
    (1) schrijfgerief, los d.w.z. \emph{niet} in een pennenzak (geen
    papier; er zit examenpapier bij de opgaven),
    (2) je rekenmachine (zonder alfanumerieke data en zonder
    geheugenkaarten),
    (3) het formularium.
  \item Volledig \emph{verboden te gebruiken}: alle apparatuur met
    geheugen- of communicatiefunctie zoals GSM, smartphone,
    smartwatch, muziekspeler, \ldots
    Je tas staat vooraan in het lokaal. Hang je jas aan de kapstok of
    leg hem bij je tas.
  \item Schrijf je naam op het titelblad van de opgave in het daartoe
    voorziene vak. Op de andere bladen schrijf je je naam
    \emph{niet}. Je examenopgave heeft een uniek nummer dat toelaat het
    te identificeren.
  \item Op het einde van het examen geef je \emph{alle} bladen weer af
    aan de aanwezige docent.
  \end{enumerate}
  Succes!
}
\studentnr{127}
```

```

\setmcsymbol{\bigcirc}

\begin{document}
\maketitle
\question{[VLATOP-BISTRO]}
\questionweight{3}

Geef de eerste vijf laureaten van de VLATOP-bistro
competitie.

\question{[BECHAMEL]}
\questionweight{7}

Welk van de onderstaande ingrediënten hoort niet thuis in
een b\'echamel saus:
\mc{Melk}
\mc{Boter}
\mc{Bloem}
\mc{Eieren}
\mc{Suiker}

\insertsolutionspagepartial{2}

\insertsolutionspage{}
\clearpage

\question{[BISTROCULTURE-1]}
\questionweight{10}

\begin{enumerate}[label=\alph*]
\item Bespreek de evolutie van de Noord-Europese bistrocultuur
gedurende de laatste vijftig jaar.
\item Breng dit in relatie tot de
opkomst van de georganiseerde recensies zoals die van Michelin en
Gault-Millau.
\end{enumerate}

\insertsolutionspagepartial{23}
\foreach \i in {1,2,3} {
\insertsolutionspage{}
}
\foreach \i in {1,2} {
\insertsolutionspage{Kladpapier}
}
\end{document}
</ex-example1>

```

Two columns

```

<*ex-example2>
\documentclass[ti,a4paper,10pt]{uantwerpenexam}
\usepackage{newpctext} % demonstration of some fine font packages

```

```

\usepackage{newpxmath}
\usepackage{enumitem}
\usepackage[dutch,english]{babel} % last language loaded will
                                   % determine logo version (change to
                                   % [dutch] for a monolingual version)

\course{1876FTIDUM}{5-Bistrology}
\lecturer{Walter Daems}
\lecturer{Paul Levrie}
\degree{Bachelor of Science in de industri\ "ele wetenschappen - elektronica-
ICT}
\academicyear{2017-2018}
\exampart{Written Exam}
\examgroupnumber{1 (eerste examenkans-inhaal)}
\examdate{2018-01-29}
\examlength{4h}
\tstart{08h30}
\tend{12h30}
\room{G.U.025}
\room{G.U.026}
\extrainfo{
  \engdut{
    Important information:\\\par
    The Education and Examination Regulations (EER) hold for this
    examination in full.
    However, before starting, I'd like to set some rules straight:
  }
  {
    Belangrijke informatie:\\\par
    Het volledige Onderwijs- en Examenreglement (OER) is van toepassing
    op dit examen.
    Toch wil ik vooraf nog een aantal regels duidelijk stellen:
  }
  \engdut{
    \begin{itemize}
    \item \emph{Can be used:} (1) writing gear (\emph{not} in a pencil
      case); you don't need paper; there's plenty of paper in your exam
      copy;
      (2) your calculator (without alphanumerical data and without memory
      cards); (3) the formula collection.
    \end{itemize}
  }
  {
    \begin{itemize}
    \item Mogen op je tafeltje aanwezig zijn:
      (1) schrijfgereief, los d.w.z. \emph{niet} in een pennenzak (geen
      papier; er zit examenpapier bij de opgaven),
      (2) je rekenmachine (zonder alfanumerieke data en zonder
      geheugenkaarten),
      (3) het formularium.
    \end{itemize}
  }
  \engdut{
    \begin{itemize}

```

```

\item \emph{May not be used:} all equipment with memory or
communications facilities, like cell phones, smart phones, smart
watches, music players, \ldots
Your bag must be put in the front of the room. Put your coat on the
hallstand or next to your bag.
\end{itemize}
}
{
\begin{itemize}
\item Volledig \emph{verboden te gebruiken}: alle apparatuur met
geheugen- of communicatiefunctie zoals GSM, smartphone,
smartwatch, muziekspeler, \ldots
Je tas staat vooraan in het lokaal. Hang je jas aan de kapstok of
leg hem bij je tas.
\end{itemize}
}
\engdut{
\begin{itemize}
\item Write your name on the title page. Don't write your name on
the subsequent pages. Your copy has a unique number to identify it
as yours.
\end{itemize}
}
{
\begin{itemize}
\item Schrijf je naam op het titelblad van de opgave in het daartoe
voorzien vak. Op de andere bladen schrijf je je naam
\emph{niet}. Je examenopgave heeft een uniek nummer dat toelaat het
te identificeren.
\end{itemize}
}
\engdut{
\begin{itemize}
\item Take your time to \emph{answer all questions in writing}. The
point weights are listed above every question. Be complete in your
answer, but stick to the point. Take into account the available time.
\end{itemize}
}
{
\begin{itemize}
\item Neem je tijd om \emph{alle vragen schriftelijk te
beantwoorden}. Het puntengewicht van een vraag is bovenaan de vraag
op de opgavebladen vermeld. Wees volledig in je antwoord, maar ter
zake. Houd rekening met de beschikbare tijd.
\end{itemize}
}
\engdut{
\begin{itemize}
\item Hand in \emph{all} papers to the staff member on duty, at the
end of the examination.
\end{itemize}
Success!
}
{

```



```

\begin{itemize}
\item Op het einde van het examen geef je \emph{alle} bladen weer af
aan de aanwezige docent.
\end{itemize}
Succes!
}
\clearpage
}

\studentnr{29}
\begin{document}
\maketitle
\question{[VLATOP-BISTRO]}
\questionweight{3}

\engdut{
Write down the first five laureates of the VALTOP-bistro competition.
}
{
Geef de eerste vijf laureaten van de VLATOP-bistro
competitie.
}

\question{[BECHAMEL]}
\questionweight{7}

\engdut{
Which of the ingredients below does not belong in a b\'echamel
sauce:
}
{
Welk van de onderstaande ingredi\''enten hoort niet thuis in
een b\'echamel saus:
}
\engdutmc{Milk}{Melk}
\engdutmc{Butter}{Boter}
\engdutmc{Flower}{Bloem}
\engdutmc{Eggs}{Eieren}
\engdutmc{Sugar}{Suiker}

\insertsolutionspagepartial{20}

\insertsolutionspage{}
\clearpage

\question{[BISTROCULTURE-1]}
\questionweight{10}

\engdut{
\begin{enumerate}[label=\alph*]
\item Discuss the evolution of the Northern European bistro culture during
the latest fifty years.
\item Relate this to the rise of organized reviews
like the ones of Michelin and Gault-Millau.

```

```

\end{enumerate}
}
{
\begin{enumerate}[label=\alph*]
\item Bespreek de evolutie van de Noord-Europese bistrocultuur
gedurende de laatste vijftig jaar.
\item Breng dit in relatie tot de
opkomst van de georganiseerde recensies zoals die van Michelin en
Gault-Millau.
\end{enumerate}
}

\insertsolutionspagepartial{22.5}
\foreach \i in {1,2,3} {
\insertsolutionspage{}
}
\foreach \i in {1,2} {
\insertsolutionspage{Scrap/Klad}
}
\end{document}
</ex-example2>

```

6 Implementation of the classes

6.1 Common options

Colors appear in any document, so let's define them in common in a separate package

```

1 <*clo>
2 \newif\if@neutralcolors
3 \@neutralcolorsfalse
4 \DeclareOption{neutralcolors}{\@neutralcolorstrue}
5
6 \newcommand*\colormodel{rgb}
7 \newif\if@cmyk
8 \@cmykfalse
9 \DeclareOption{cmyk}{\renewcommand*\colormodel{cmyk}\@cmyktrue}
10 \DeclareOption{rgb}{\renewcommand*\colormodel{rgb}\@cmykfalse}
11
12 \newcommand*\facinenglish[1]{\renewcommand\@faculty{#1}}
13 \newcommand*\facindutch[1]{
14   \AtBeginDocument{
15     \makeatother
16     \@ifpackageloaded{babel}{
17       \addto\captionsdutch{\renewcommand*\@faculty{#1}}
18     }{}
19     \makeatletter
20   }
21 }
22 \newcommand*\fselector{ua}

```

```

23 \newcommand*\lselector{en}
24 \newlength\logounitheight
25 \setlength\logounitheight{0.8cm}
26
27 \newcommand*\@faculty{~}
28 \DeclareOption{be}{
29   \renewcommand*\fselector{be}
30   \setlength\logounitheight{1cm}
31   \facinenglish{Faculty of Business and Economics}
32   \facindutch{Faculteit Bedrijfswetenschappen en Economie}
33 }
34 \DeclareOption{fbd}{
35   \renewcommand*\fselector{fbd}
36   \setlength\logounitheight{1cm}
37   \facinenglish{Faculty of Pharmaceutical, Biomedical and Veterinary Sciences}
38   \facindutch{Faculteit Farmaceutische, Biomedische en Diergeneeskundige
39     Wetenschappen}
40 }
41 \DeclareOption{ggw}{
42   \renewcommand*\fselector{ggw}
43   \setlength\logounitheight{1cm}
44   \facinenglish{
45     Faculty of Medicine and Health Sciences}
46   \facindutch{Faculteit Geneeskunde en Gezondheidswetenschappen}
47 }
48 \DeclareOption{lw}{
49   \renewcommand*\fselector{lw}
50   \setlength\logounitheight{1cm}
51   \facinenglish{Faculty of Arts}
52   \facindutch{Faculteit Letteren en Wijsbegeerte}
53 }
54 \DeclareOption{ow}{
55   \renewcommand*\fselector{ow}
56   \setlength\logounitheight{1cm}
57   \facinenglish{Faculty of Design Sciences}
58   \facindutch{Faculteit Ontwerpwetenschappen}
59 }
60 \DeclareOption{re}{
61   \renewcommand*\fselector{re}
62   \setlength\logounitheight{1cm}
63   \facinenglish{Faculty of Law}
64   \facindutch{Faculteit Rechten}
65 }
66 \DeclareOption{sw}{
67   \renewcommand*\fselector{sw}
68   \setlength\logounitheight{1cm}
69   \facinenglish{Faculty of Social Sciences}
70   \facindutch{Faculteit Sociale Wetenschappen}
71 }
72 \DeclareOption{ti}{
73   \renewcommand*\fselector{ti}
74   \setlength\logounitheight{1cm}
75   \facinenglish{Faculty of Applied Engineering}
76   \facindutch{Faculteit Toegepaste Ingenieurswetenschappen}

```

```

77 }
78 \DeclareOption{we}{
79   \renewcommand*\fselector{we}
80   \setlength\logounitheight{1cm}
81   \facinenglish{Faculty of Science}
82   \facindutch{Faculteit Wetenschappen}
83 }
84 \DeclareOption{iob}{
85   \renewcommand*\fselector{iob}
86   \setlength\logounitheight{1cm}
87   \facinenglish{Institute of Development Policy}
88   \facindutch{Instituut voor Ontwikkelingsbeleid- en beheer}
89 }
90 \newcommand*\@facultyacronym{\expandafter\uppercase\expandafter{\fselector}}
91
92 \AtBeginDocument{
93   \makeatother
94   \ifpackageloaded{babel}{
95     \addto\captionsdutch{
96       \renewcommand*\lselector{nl}
97     }{}
98   }
99   \makeatletter
100
101   \newcommand*\logopos{Logos/logo-uantwerpen-\fselector-\lselector-\colormodel-
pos}
102   \newcommand*\logoposua{Logos/logo-uantwerpen-ua-\lselector-\colormodel-
pos}
103   \newcommand*\logoneg{Logos/logo-uantwerpen-\fselector-\lselector-\colormodel-
neg}
104   \newcommand*\logonegua{Logos/logo-uantwerpen-ua-\lselector-\colormodel-
neg}
105   \newcommand*\logomonowhite{Logos/logo-uantwerpen-\fselector-\lselector-
\colormodel-mono-white}
106   \newcommand*\logomonowhiteua{Logos/logo-uantwerpen-ua-\lselector-\colormodel-
mono-white}
107   \newcommand*\iconfile{Logos/icon-uantwerpen-\fselector-\colormodel}
108   \newcommand*\iconfileua{Logos/icon-uantwerpen-ua-\colormodel}
109 }
110 </clo>

```

6.2 Color scheme

```

111 < *cls>
112 \if@cmymk
113 %% UAntwerpen
114 \definecolor{uauamain}{cmyk}{0.00,0.96,0.82,0.01}
115 \definecolor{uauaside}{cmyk}{1.00,0.71,0.00,0.51}
116 %% Faculteit Bedrijfswetenschappen en Economie
117 \definecolor{uabemain}{cmyk}{0.58,0.00,1.00,0.04}
118 \definecolor{uabeside}{cmyk}{0.29,0.04,0.41,0.00}
119 %% Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen
120 \definecolor{uafbdmain}{cmyk}{0.65,0.03,0.00,0.00}

```

```

121 \definecolor{uafbdside}{cmyk}{0.33,0.03,0.00,0.00}
122 %% Faculteit Geneeskunde en Gezondheidswetenschappen
123 \definecolor{uaggwmain}{cmyk}{0.61,0.55,0.00,0.00}
124 \definecolor{uaggwside}{cmyk}{0.21,0.27,0.03,0.00}
125 %% Faculteit Letteren en Wijsbegeerte
126 \definecolor{ualwmain}{cmyk}{0.00,0.27,0.85,0.00}
127 \definecolor{ualwside}{cmyk}{0.00,0.16,0.51,0.00}
128 %% Faculteit Ontwerpwetenschappen
129 \definecolor{uaowmain}{cmyk}{0.53,0.25,0.26,0.05}
130 \definecolor{uaowside}{cmyk}{0.25,0.08,0.16,0.00}
131 %% Faculteit Rechten
132 \definecolor{uaremain}{cmyk}{0.10,1.00,0.90,0.05}
133 \definecolor{uareside}{cmyk}{0.04,0.45,0.36,0.00}
134 %% Faculteit Sociale Wetenschappen
135 \definecolor{uaswmain}{cmyk}{0.08,0.00,1.00,0.26}
136 \definecolor{uaswside}{cmyk}{0.20,0.11,0.50,0.00}
137 %% Faculteit Toegepaste Ingenieurswetenschappen
138 \definecolor{uatimain}{cmyk}{0.31,1.00,0.00,0.01}
139 \definecolor{uatiside}{cmyk}{0.11,0.30,0.02,0.00}
140 %% Faculteit Wetenschappen
141 \definecolor{uawemain}{cmyk}{1.00,0.20,0.00,0.25}
142 \definecolor{uaweside}{cmyk}{0.40,0.08,0.00,0.10}
143 %% IOB
144 \definecolor{uaiobmain}{cmyk}{0.05,0.75,1.00,0.00}
145 \definecolor{uaiobside}{cmyk}{0.40,0.08,0.00,0.10}
146 \else
147 %% UAntwerpen
148 \definecolor{uauamain}{RGB}{234,44,56}
149 \definecolor{uauaside}{RGB}{0,46,101}
150 %% Faculteit Bedrijfswetenschappen en Economie
151 \definecolor{uabemain}{RGB}{101,168,18}
152 \definecolor{uabeside}{RGB}{185,213,169}
153 %% Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen
154 \definecolor{uafbdside}{RGB}{68,184,243}
155 \definecolor{uafbdside}{RGB}{181,221,247}
156 %% Faculteit Geneeskunde en Gezondheidswetenschappen
157 \definecolor{uaggwmain}{RGB}{117,117,203}
158 \definecolor{uaggwside}{RGB}{198,182,210}
159 %% Faculteit Letteren en Wijsbegeerte
160 \definecolor{ualwmain}{RGB}{241,181,61}
161 \definecolor{ualwside}{RGB}{255,218,145}
162 %% Faculteit Ontwerpwetenschappen
163 \definecolor{uaowmain}{RGB}{130,161,173}
164 \definecolor{uaowside}{RGB}{200,217,216}
165 %% Faculteit Rechten
166 \definecolor{uaremain}{RGB}{210,8,36}
167 \definecolor{uareside}{RGB}{237,157,144}
168 %% Faculteit Sociale Wetenschappen
169 \definecolor{uaswmain}{RGB}{173,165,0}
170 \definecolor{uaswside}{RGB}{215,211,148}
171 %% Faculteit Toegepaste Ingenieurswetenschappen
172 \definecolor{uatimain}{RGB}{177,0,151}
173 \definecolor{uatiside}{RGB}{221,184,210}
174 %% Faculteit Wetenschappen

```

```

175 \definecolor{uawemain}{RGB}{0,108,169}
176 \definecolor{uaweside}{RGB}{151,192,223}
177 %% IOB
178 \definecolor{uaiobmain}{RGB}{230,98,8}
179 \definecolor{uaiobside}{RGB}{151,192,223}
180 \fi
181 %%
182 \if@neutralcolors
183 \colorlet{maincolor}{uauaside}
184 \colorlet{sidecolor}{uauamain}
185 \colorlet{basecolor}{uauaside}
186 \else
187 \colorlet{maincolor}{ua\fselector main}
188 \colorlet{sidecolor}{ua\fselector side}
189 \colorlet{basecolor}{uauaside}
190 \fi
191 </cls>

```

6.3 Class inheritance

For convenience, we'll derive from the standard L^AT_EX `book`, `letter` and `article` class.

Before loading the class, we provide the extra options.

```

192 <*ct>
193 \newif\if@modern
194 \@modernfalse
195 \DeclareOption{modern}{\@moderntrue}
196 </ct>
197 <*ct | rp>
198 \newif\if@copyright
199 \DeclareOption{copyright}{\@copyrighttrue}
200 </ct | rp>
201 %
202 <*ct | bmt | pt | rp | le>
203 \newif\if@filled
204 \DeclareOption{filled}{\@filledtrue}
205 </ct | bmt | pt | rp | le>
206 %
207 <*ex>
208 \newif\if@examiner
209 \DeclareOption{examiner}{\@examinertrue}
210 </ex>
211 <*ct | pt>
212 \newif\if@cameraready
213 \DeclareOption{cameraready}{\@camerareadytrue}
214 </ct | pt>

```

We execute some standard options: We load the `book` class for course texts, reports and PhD theses, and the `scrbook` class for bachelor and master theses.

```

215 <*ct | bmt | pt | rp>
216 \input{uantwerpencommonoptions.clo}

```

```

217 \ExecuteOptions{a4paper,11pt,final,oneside,openright}
218 \ProcessOptions\relax
219 </ct|bmt|pt|rp>
220 <ct|pt|rp>\LoadClassWithOptions{book}
221 <bmt>\LoadClassWithOptions{scrbook}
222 % We load the |letter| class for letters
223 <*le>
224 \input{uantwerpencommonoptions.clo}
225 \ExecuteOptions{a4paper,10pt,final,oneside,openright}
226 \ProcessOptions
227 \LoadClassWithOptions{letter}
228 \newcommand*\tat{\makeatletter @\makeatother}
229 </le>
230 % We load the |article| class for exams
231 <*ex>
232 \input{uantwerpencommonoptions.clo}
233 \ExecuteOptions{a4paper,twoside,10pt}
234 \ProcessOptions
235 \LoadClassWithOptions{article}
236 </ex>

```

6.4 Modern typesetting

Let's force some modern typesetting without paragraph indentation and with a decent paragraph spacing.

```

237 <*ct|bmt|pt|rp|le|ex>
238 \setlength{\parindent}{0pt}
239 \addtolength{\parskip}{0.75\baselineskip}
240 \setcounter{secnumdepth}{3}
241 </ct|bmt|pt|rp|le|ex>

```

6.5 Auxiliary packages

Reinventing the wheel is a waste of time, let's preload some appropriate auxiliary packages that have proven their value.

6.5.1 Geometry

Let's reduce the margins to 1 inch each for the documents that are unlikely to be glue bound:

```

242 <*ct|rp|ex>
243 \RequirePackage[top=2.5cm,bottom=2.5cm,left=2.5cm,right=2.5cm]{geometry}
244 </ct|rp|ex>
245 % Let's follow the instructions by ADS for the (marginal(!) glue provision):
246 <*pt>
247 \RequirePackage[paperwidth=180mm,paperheight=260mm,
248               top=2.5cm,bottom=2.5cm,left=2.6cm,right=1.8cm,twoside]
249               {geometry}

```

```

250 </pt>
251 % Also, let's follow the office templates for the bachelor's and
252 % master's theses:
253 <*bmt>
254 \RequirePackage[top=2.6cm, bottom=2.5cm, left=3.5cm, right=1.6cm]{geometry}
255 </bmt>
256 % Letters are a little bit different:
257 <*le>
258 \RequirePackage[top=1in, bottom=1in, left=1.34in, right=1in]{geometry}
259 \RequirePackage[normalem]{ulem}
260 </le>

```

6.5.2 Preparing for L^AT_EX3

Let's make things a bit easier for me.

```

261 <*ct | bmt | pt | rp | le | ex>
262 %\RequirePackage{expl3}
263 \RequirePackage[check-declarations]{expl3} % I use this during debug phase
264 \RequirePackage{xparse}
265 </ct | bmt | pt | rp | le | ex>

```

6.5.3 Font packages

Note that the use of cmbright is no longer imposed (as of v1.3). Using a good font is now up to the user. The packages 'newpxtext/newpxmath' and 'cmbright' are highly recommended. For writing letters, 'Calibri' is the official font of the University of Antwerp.

```

266 <*ct | bmt | pt | rp | le>
267 % no more font code
268 </ct | bmt | pt | rp | le>

```

6.5.4 Boilerplate packages

Some boilerplate packages and an empty macro to test against (using\ifx)

```

269 <*ct | bmt | pt | rp | le | ex>
270 \RequirePackage{iftex}
271 \RequirePackage{xstring}
272 \RequirePackage{etoolbox}
273 \RequirePackage{ifthen}
274 \IfFileExists{shellesc.sty}{\RequirePackage{shellesc}}{}
275 \newcommand{\@emptymacro}{}
276 </ct | bmt | pt | rp | le | ex>

```

6.5.5 Graphics packages

Graphics packages that are required for the title page, but may come in handy for regular use as well.

Some packages for coursetext and bamathesis:

```

277 <*ct | bmt | pt | rp | le | ex>
278 \RequirePackage{graphicx}
279 \RequirePackage{soul}
280 \RequirePackage[export]{adjustbox}
281 \RequirePackage{color}
282 \RequirePackage{tikz}
283 \usetikzlibrary{positioning,calc}
284 \RequirePackage{eso-pic}
285 </ct | bmt | pt | rp | le | ex>
286 <*ct | rp>
287 \if@copyright
288 \RequirePackage[contents={},color=lightgray,scale=3]{background}
289 \fi
290 </ct | rp>
291 <*pt>
292 \usepackage{ean13isbn}
293 </pt>

```

6.5.6 UAntwerpen color and logo scheme

```

294 <*ct | bmt | pt | rp | le | ex>
295 \RequirePackage{uantwerpencolorlogoscheme}
296 </ct | bmt | pt | rp | le | ex>

```

6.5.7 Header/Footer

The de-facto standard for headers and footers:

```

297 <*ct | bmt | pt | rp | le | ex>
298 \RequirePackage{fancyhdr}
299 </ct | bmt | pt | rp | le | ex>

```

6.6 Colors

```

300 <*ct | bmt | pt | rp | le | ex>
301 \definecolor{lightgray}{cmyk}{0.00,0.00,0.00,0.05}
302 \definecolor{darkgray}{cmyk}{0.00,0.00,0.00,0.80}
303 \definecolor{watermark}{cmyk}{0.00,0.00,0.00,0.05}
304 </ct | bmt | pt | rp | le | ex>

```

6.7 Fancy highlighting

Though I'm not keen on highlighting, the style gurus have decided to put highlighting in the titles of the bachelor's and master's theses. The macro `blow` highlights a token sequence using white text on the main color.

```

305 <*bmt>
306 \newcommand\@uantwerpenocshl[1]{\begin{lrbox}{\@tempboxa}\end{lrbox}\@uantwerpenocshlbox{
307 \newcommand\@uantwerpenocshlbox}[1]{%
308 \tikz{
309 \pgfpathrectangle{\pgfpoint{1pt}{0pt}}{\pgfpoint{\wd #1}{\ht #1}}%

```

```

310 \pgfusepath{use as bounding box}%
311 \node[anchor=base
312 west,align=center,fill=maincolor,text=white,outer sep=0pt,inner
313 xsep=5pt, inner ysep=0pt,minimum height=\ht\strutbox+1pt]{\raisebox{1pt}{\strut}\strut\use
314 }%
315 }
316 \bmt

```

6.8 Fancy inset texts and quotes

```

317 \bmt | pt | ct | rp)
318 \newcommand\insettext[1]{
319 \textcolor{basecolor}{
320 \begin{tabular}{@{\hskip3ex\textcolor{maincolor}{\vrule width 2.5pt}\hskip3ex\large\bfseries
321 \strut #1
322 \end{tabular}
323 }
324 }
325 \newcommand\insetquote[1]{
326 \insettext{
327 \begin{tikzpicture}[scale=0.65]
328 \fill[green!60!black] (0.4,0) -- (0.5,0) -- (0.75,-0.15) -- (0.75,0) --
329 (0.9,0) arc(-90:0:0.1) -- (1,0.65) arc(0:90:0.1) -- (0.1,0.75) arc
330 (90:180:0.1) -- (0,0.1) arc(-180:-90:0.1) -- cycle;
331 \foreach \x in {0.35,0.7} {
332 \begin{scope}[shift={(\x,0.425)},scale=0.25]
333 \fill[white] (0,0) circle[radius=0.5];
334 \fill[white] (0.5,0) arc(0:-90:1) --
335 (-0.5,-0.725) arc(-90:0:0.725) -- cycle;
336 \end{scope}
337 }
338 \end{tikzpicture}}\
339 #1
340 }
341 }
342 \bmt | pt | ct | rp)

```

6.9 Camera-ready version

For the course texts, this means printing no artwork (as universitas prints your front page on a pre-printed color page) This is taken care of by the titlepage and finalpage environments, so no extra code is needed here.

For PhD texts, this means providing bleed space. We implemented this using the very fine `crop` package.

```

343 \*pt)
344 \if@cameraready
345 \RequirePackage[cam,center,width=21truecm,height=29.7truecm]{crop}
346 \fi
347 \bmt

```

6.10 Data dictionary and parser

Let's start by defining our dictionary:

```
348 <*ct | bmt | pt | rp | le | ex>
349 \ExplSyntaxOn
350 \prop_new:N \g_@@_data_prop
351 </ct | bmt | pt | rp | le | ex>%
```

The dictionary can be accessed using the following document command:

```
352 <*ct | bmt | pt | rp | le | ex>
353 \NewDocumentCommand{\uantwerpendocsprop}{m}{
354   \prop_item:Nn \g_@@_data_prop{#1}
355 }
356 \NewDocumentCommand{\uantwerpendocsPROP}{m}{
357   \str_uppercase:f { \prop_item:Nn \g_@@_data_prop{#1} }
358 }
359 </ct | bmt | pt | rp | le | ex>%
```

To this end, we use the following parsing infrastructure:

```
360 <*ct | bmt | pt | rp | le | ex>
361 \NewDocumentCommand{\uantwerpendocspropread}{m}{
362   \@@_datareader:n { #1 }
363 }
364 \cs_generate_variant:Nn \prop_gput:Nnn{ Nxx }
365 \cs_new_nopar:Npn \@@_dataparser:w #1 = #2!! {
366   \tl_set:Nn \l_tmpa_tl {#1}
367   \tl_set:Nn \l_tmpb_tl {#2}
368   \tl_trim_spaces:N \l_tmpa_tl
369   \tl_trim_spaces:N \l_tmpb_tl
370   \prop_gput:Nxx \g_@@_data_prop { \l_tmpa_tl } { \l_tmpb_tl }
371 }
372 </ct | bmt | pt | rp | le | ex>
```

invoked by the following data file reader:

```
373 <*ct | bmt | pt | rp | le | ex>
374 \ior_new:N \l_@@_data_ior
375 \cs_new_nopar:Nn \@@_datareader:n {
376   \ior_open:Nn \l_@@_data_ior { uantwerpendocs-#1.data }
377   \ior_str_map_inline:Nn \l_@@_data_ior {
378     \regex_match:nnTF {=} {##1} {
379       \@@_dataparser:w ##1!!
380     }
381   }
382 }
383 \ior_close:N \l_@@_data_ior
384 }
385 </ct | bmt | pt | rp | le | ex>
```

By default, we load the generic (not yet!) and the english data file:

```
386 <*ct | bmt | pt | rp | le | ex>
```

```

387 \clist_map_inline:nn {en} {
388   \@@_datareader:n { #1 }
389 }
390 %\prop_show:N \g_@@_data_prop
391 \ExplSyntaxOff
392 </ct | bmt | pt | rp | le | ex>

```

6.11 Babel provisions

We will fill the dictionary from the generic data file (for elements that should not be translated, currently empty) and the language specific data files (for elements that can be translated).

```

393 <*ct | bmt | pt | rp | le | ex>
394 \newcommand*\@logo{\logopos}
395 \AtBeginDocument{
396   \makeatother
397   \@ifpackageloaded{babel}{
398     \addto\captionenglish{%
399       \uantwerpendocspropread{en}
400     }
401     \addto\captionsdutch{%
402       \uantwerpendocspropread{nl}
403     }
404   }
405   {}
406   \uantwerpendocspropread{degree}
407   \uantwerpendocspropread{doctype}
408   \makeatletter
409 }
410 </ct | bmt | pt | rp | le | ex>

```

The English data can be found below: <*endata> org-be = Faculty of Business and Economics org-fbd = Faculty of Pharmaceutical, Biomedical and Veterinary Sciences org-ggw = Medicine and Health Sciences org-lw = Faculty of Arts org-ow = Faculty of Design Sciences org-re = Faculty of Law org-sw = Faculty of Social Sciences org-ti = Faculty of Applied Engineering org-we = Faculty of Science org-iob = Institute of Development Policy org-ua = University of Antwerp arr = All rights reserved of = of domainname = uantwerp.be datename = Date subjectname = Subject acyearname = Academic year baname = Bachelor of Science spname = Switching Programme vpname = Preparatory Programme maname = Master of Science phdname = PhD thesisname = Thesis mthesisname = Master's thesis bthesisname = Bachelor's thesis lecturername = Lecturer lecturersname = Lecturers supervisorname = Supervisor supervisorsname = Supervisors cosupervisorname = Cosupervisor cosupervisorsname = Cosupervisors extsupervisorname = External supervisor extsupervisorsname = External supervisors examname = Exam — Examen seriesname = Series lastname = Last name — Naam firstname = First name — Voornaam docketname = Docket No. — Rolnr. roomname = Room — Lokaal roomsname = Rooms — Lokalen examstartname = Start — Begin examendname = End — Einde examdurationname = Exam duration — Duur van het examen juryname = Jury jurymembersname = Members jurychairman-

name = Chairman bmthesisname = Thesis to obtain the degree of pthesisnamei = Thesis submitted in fulfilment of the requirements for the degree of pthesisnameii = at University of Antwerp weightname = Weight </endata>

The Dutch data can be found below: <*nldata> org-be = Faculteit Bedrijfswetenschappen en Economie org-fbd = Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen org-ggw = Faculteit Geneeskunde en Gezondheidswetenschappen org-lw = Faculteit Letteren en Wijsbegeerte org-ow = Faculteit Ontwerpwetenschappen org-re = Faculteit Rechten org-sw = Faculteit Sociale Wetenschappen org-ti = Faculteit Toegepaste Ingenieurswetenschappen org-we = Faculteit Wetenschappen org=iob = Instituut voor Ontwikkelingsbeleid- en -beheer org-ua = Universiteit Antwerpen arr = Alle rechten voorbehouden of = van domainname = uantwerpen.be datename = Onderwerp subjectname = Datum acyearname = Academiejaar baname = Bachelor of Science spname = Schakelprogramma vpname = Voorbereidingsprogramma maname = Master of Science phdname = Doctoraat thesisname = Afstudeerproef mthesisname = Masterproef bthesisname = Bachelorproef lecturername = Titularis lecturersname = Titularissen supervisorname = Promotor supervisorsname = Promotoren cosupervisorname = Copromotor cosupervisorsname = Copromotoren extsupervisorname = Externe Promotor extsupervisorsname = Externe Promotoren examname = Examen seriesname = Reeks lastname = Naam firstname = Voornaam docketname = Rolnr. roomname = Lokaal roomsname = Lokalen examstartname = Begin examendname = Einde examdurationname = Duur van het examen juryname = Jury jurymembersname = Leden jurychairmanname = Voorzitter bmthesisname = Proefschrift tot het behalen van de graad van pthesisnamei = Proefschrift voorgelegd tot het behalen van de graad van pthesisnameii = aan de Universiteit Antwerpen te verdedigen door weightname = Gewicht </nldata>

6.12 Bachelor and Master document types

```

411 <*doctypedata>
412 nl-ba = Bachelorproef
413 nl-ma = Masterproef
414 nl-pr = Projectverslag
415 en-ba = Bachelor's thesis
416 en-ma = Master's thesis
417 en-pr = Project report
418 </doctypedata>

419 <*bmt>
420 \ExplSyntaxOn
421 \cs_generate_variant:Nn \prop_item:Nn{ Nx }
422 \NewDocumentCommand{\uantwerpendocstype}{m}{
423   \prop_item:Nx \g_@@_data_prop { #1 }
424 }
425 \ExplSyntaxOff
426 </bmt>

```

6.13 Bachelor and Master disclaimers

```

427 <*bmt>

```

```

428 \newcommand\disclaimer[1]{
429   Disclaimer #1\newline\newline
430   This document is an examination document that has not been
431   corrected for any errors identified. Without prior written
432   permission of both the supervisor(s) and the author(s), any copying,
433   copying, using or realizing this publication or parts thereof
434   is prohibited. For requests for information regarding the copying
435   and/or use and/or realisation of parts of this publication, please
436   contact to the university at which the author is registered.
437   \newline\newline
438   Prior written permission from the supervisor(s) is also
439   required for the use for industrial or commercial utility of the
440   (original) methods, products, circuits and programs described in this
441   thesis, and for the submission of this publication for participation
442   in scientific prizes or competitions.
443   \newline\newline
444   This document is in accordance with the master thesis regulations and the
445   Code of Conduct. It has been reviewed by the supervisor and the attendant.
446 }
447 \AtBeginDocument{
448   \makeatother
449   \@ifpackageloaded{babel}{
450     \addto\captionsdutch{%
451       \renewcommand\disclaimer[1]{
452         Disclaimer #1\newline\newline
453         Dit document is een examendocument dat niet werd gecorrigeerd voor
454         eventueel vastgestelde fouten. Zonder voorafgaande schriftelijke
455         toestemming van zowel de promotor(en) als de auteur(s) is overnemen,
456         kopiëren, gebruiken of realiseren van deze uitgave of gedeelten ervan
457         verboden. Voor aanvragen tot of informatie i.v.m. het overnemen en/of
458         gebruik en/of realisatie van gedeelten uit deze publicatie, wendt u
459         tot de universiteit waaraan de auteur is ingeschreven.
460         \newline\newline
461         Voorafgaande schriftelijke toestemming van de promotor(en) is eveneens
462         vereist voor het aanwenden van de in dit afstudeerwerk beschreven
463         (originele) methoden, producten, schakelingen en programma's voor
464         industrieel of commercieel nut en voor de inzending van deze
465         publicatie ter deelname aan wetenschappelijke prijzen of wedstrijden.
466         \newline\newline
467         Dit document is in overeenstemming met het masterproefreglement en de
468         gedragscode en nagekeken door promotor en begeleider.
469       }
470     }
471   }{}
472   \makeatletter
473 }
474 </bmt>

```

6.14 Educational degrees

```

475 (*degreedata)
476 ti-nl-ba-bk = Bachelor of Science in de industriële wetenschappen: bouwkunde
477 ti-nl-ba-ch = Bachelor of Science in de industriële wetenschappen: chemie
478 ti-nl-ba-em = Bachelor of Science in de industriële wetenschappen: elektromechanica

```

479 ti-nl-ba-ei = Bachelor of Science in de industriële wetenschappen: elektronica-
 ICT
 480 ti-nl-ma-bk = Master of Science in de industriële wetenschappen: bouwkunde
 481 ti-nl-ma-bch = Master of Science in de industriële wetenschappen: biochemie
 482 ti-nl-ma-ch = Master of Science in de industriële wetenschappen: chemie
 483 ti-nl-ma-em = Master of Science in de industriële wetenschappen: elektromechanica
 484 ti-nl-ma-ei = Master of Science in de industriële wetenschappen: elektronica-
 ICT
 485 ti-en-ma-ei = Master of Science in Electronics and ICT Engineering Technology
 486 ti-nl-eduma-wtstem = Educatieve master of Science in de wetenschappen en technologie: STEM
 487 we-nl-eduma-wtstem = Educatieve master of Science in de wetenschappen en technologie: STEM
 488 we-nl-eduma-wtbchbt = Educatieve master of Science in de wetenschappen en technologie: biochemie
 489 we-nl-eduma-wtbio = Educatieve master of Science in de wetenschappen en technologie: biologie
 490 we-nl-eduma-wtch = Educatieve master of Science in de wetenschappen en technologie: chemie
 491 we-nl-eduma-wtffy = Educatieve master of Science in de wetenschappen en technologie: fysica
 492 we-nl-eduma-wtinf = Educatieve master of Science in de wetenschappen en technologie: informatika
 493 we-nl-eduma-wtwi = Educatieve master of Science in de wetenschappen en technologie: wiskunde
 494 we-nl-ba-bircg = Bachelor of Science in de bio-ingenieurswetenschappen: cel- en genbiotechnologie
 495 we-nl-ba-birvt = Bachelor of Science in de bio-ingenieurswetenschappen: chemie en voedingstechnologie
 496 we-nl-ba-birlb = Bachelor of Science in de bio-ingenieurswetenschappen: land- en bosbeheer
 497 we-nl-ba-birmt = Bachelor of Science in de bio-ingenieurswetenschappen: milieutechnologie
 498 we-nl-ba-bio = Bachelor of Science in de biologie
 499 we-nl-ma-bioeg = Master of Science in de biologie: evolutie en gedragsbiologie
 500 we-en-ma-biocr = Master of Science in biology: biodiversity, conservation and restoration
 501 we-en-ma-biogcb = Master of Science in biology: global change biology
 502 we-en-ma-biomb = Master of Science in molecular biology
 503 we-nl-ba-ch = Bachelor of Science in de chemie
 504 we-en-ma-ch = Master of Science in chemistry
 505 we-nl-ba-inf = Bachelor of Science in de informatica
 506 we-en-ma-infcn = Master of Science in computer science: computer networks
 507 we-en-ma-infdsai = Master of Science in computer science: data science and artificial intelligence
 508 we-en-ma-infse = Master of Science in computer science: software engineering
 509 we-nl-ma-infcn = Master of Science in de informatica: computernetwerken
 510 we-nl-ma-infdsai = Master of Science in de informatica: data science en artificiële intelligentie
 511 we-nl-ma-infse = Master of Science in de informatica: software engineering
 512 we-nl-ba-fy = Bachelor of Science in de fysica
 513 we-nl-ma-fy = Master of Science in de fysica
 514 we-en-ma-fy = Master of Science in physics
 515 we-nl-ba-wi = Master of Science in wiskunde
 516 we-nl-ma-wifw = Master of Science in wiskunde: fundamentele wiskunde
 517 we-nl-ma-wiftw = Master of Science in wiskunde: financiële en toegepaste wiskunde
 518 </degreedata>
 519 <*bmt>
 520 \ExplSyntaxOn
 521 \NewDocumentCommand{\uantwerpendocsdegree}{m}{
 522 \typeout{#1}
 523 \prop_item:Nx \g_@@_data_prop { #1 }
 524 }
 525 \ExplSyntaxOff
 526 </bmt>

6.15 Tags

`\facultyacronym` The `facultyacronym` sets the faculty acronym tag `\@facultyacronym` that is used in the header/footer information. The correct acronym also sets the faculty's name correctly.

```
527 <*ct | bmt | pt | rp | le | ex>
528 \newcommand*{\facultyacronym}[1]{
529   \PackageError{uantwerpendocs}
530   {The '\protect\facultyacronym{' macro is no longer available. Use
531     your faculty abbreviation in lowercase as class options instead}
532   {The interface of uantwerpendocs 4.0 has been changed. See
533     the uantwerpendocs manual under section '5.2 The class options explained'}
534 }
535 </ct | bmt | pt | rp | le | ex>
```

`\title` The `title` tag is native to L^AT_EX. It sets the `\@title` tag that will be used on the title page.

`\subtitle` This macro sets the `\@subtitle` tag that later will be used on the title page, in the header/footer and to set the appropriate `hyperref` tag (if it is loaded).

```
536 <*ct | pt | rp>
537 \newcommand*{\@subtitle}{~}
538 \newcommand*{\subtitle}[1]{%
539   \renewcommand*\@subtitle{#1}
540 }
541 </ct | pt | rp>
```

`\shorttitle` This macro sets the `\@shorttitle` tag that later will be used in the `exam` class.

```
542 <*ex>
543 \newcommand*{\@shorttitle}{}
544 \newcommand*{\shorttitle}[1]{%
545   \renewcommand*\@shorttitle{#1}
546 }
547 </ex>
```

`\author` The `author` tag is native to L^AT_EX. It sets the `\@author` tag that will be used on the title page.

`\courseversion` This macro sets the `\@courseversion` tag that later will be used on the title page and in the header/footer.

```
548 <*ct>
549 \newcommand*{\@courseversion}{}
550 \newcommand*{\courseversion}[1]{\renewcommand*\@courseversion{#1}}
551 </ct>
```

`\versionyear` This macro sets the `\@versionyear` tag that later will be used on the title page and in the copyright message.


```

552 <*ct | rp>
553 \newcommand*{\@versionyear}{}
554 \newcommand*{\versionyear}[1]{\renewcommand*{\@versionyear}{#1}}
555 </ct | rp>

```

\publisher This macro sets the \@publisher tag that later will be used on the title page.

```

556 <*ct>
557 \newcommand{\@publisher}{Universitas Cursusdienst |
558   Prinsesstraat 16 |
559   2000 Antwerpen |
560   T +32 3 233 23 73 |
561   E info@cursusdienst.be}
562 \newcommand*{\publisher}[1]{\renewcommand*{\@publisher}{#1}}
563 </ct>

```

\publishercode This macro sets the \@publishercode tag that later will be used on the title page.

```

564 <*ct>
565 \newcommand*{\@publishercode}{}
566 \newcommand*{\publishercode}[1]{\renewcommand*{\@publishercode}{#1}}
567 </ct>

```

\companylogo This macro sets the \@companylogo tag that later will be used on the title page.

```

568 <*bmt>
569 \newcommand*{\@companylogo}{}
570 \newcommand*{\companylogo}[1]{\renewcommand*{\@companylogo}{#1}}
571 </bmt>

```

\lecturer This macro adds lecturers (Dutch: titularissen) to the course notes. Use the macro multiple times for multiple lecturers. The order will be preserved. Note that as of v4.0 all lecturers are specified using the same macro!

```

572 <*ct | ex>
573 \ExplSyntaxOn
574 \seq_new:N \g_@@_lecturers
575 \cs_new:Nn \@@_addlecturer:n {
576   \seq_gpush:Nn \g_@@_lecturers { #1 }
577 }
578 \NewDocumentCommand{\lecturer}{m}{
579   \@@_addlecturer:n { #1 }
580 }
581 \NewDocumentCommand{\jointlecturers}{m}{
582   \seq_use:Nn \g_@@_lecturers { #1 }
583 }
584 \NewDocumentCommand{\lecturersname}{f}{
585   \if_int_compare:w \seq_count:N \g_@@_lecturers > 1
586     \uantwerpendocsprop{lecturersname}
587   \else:
588     \if_int_compare:w \seq_count:N \g_@@_lecturers > 0
589       \uantwerpendocsprop{lecturername}
590     \fi

```

```

591 \fi:
592 }
593 \AtBeginDocument{
594 \seq_greverse:N \g_@@_lecturers
595 }
596
597 \ExplSyntaxOff
598 \</ct|ex>

```

\extra The **extra** tag allows to specify some extra comment (e.g. the nature of the document) in the bottom bar on the title page).

```

599 \<rp>
600 \newcommand\@extra{}
601 \newcommand\extra[1]{\renewcommand\@extra{#1}}
602 \</rp>

```

\affiliation The **affiliation** tag allows to specify the affiliation of the author.

```

603 \<pt|rp>
604 \newcommand\@affiliation{
605 \PackageError{uantwerpendocs}
606 {Please, define the affiliation of the author using the
607 '\protect\affiliation{' command in the preamble of your
608 document.}
609 {See the uantwerpendocs manual}
610 }
611 \newcommand\affiliation[1]{\renewcommand\@affiliation{#1}}
612 \</pt|rp>

```

\supervisor This macro allows to specify one or more supervisors with their affiliation. This can be done by invoking the macro as many times as needed. Note that as of v4.0 all supervisors are specified using the same macro!

```

613 \<bmt|pt>
614 \ExplSyntaxOn
615 \seq_new:N \g_@@_supervisors
616 \seq_new:N \g_@@_supervisorswithaffiliation
617 \cs_new:Nn \@@_addsupervisor:nn {
618 \seq_gpush:Nn \g_@@_supervisors { #1 }
619 \seq_gpush:Nn \g_@@_supervisorswithaffiliation { #1,~#2 }
620 }
621 \NewDocumentCommand{\supervisor}{mm}{
622 \@@_addsupervisor:nn { #1 } { #2 }
623 }
624 \NewDocumentCommand{\jointsupervisors}{mm}{
625 \seq_use:Nnnn \g_@@_supervisors { #2 } { #1 } { #2 }
626 }
627 \NewDocumentCommand{\jointsupervisorswithaffiliation}{mm}{
628 \seq_use:Nnnn \g_@@_supervisorswithaffiliation { #2 } { #1 } { #2 }
629 }
630 \NewDocumentCommand{\supervisorsname}{m}{
631 \if_int_compare:w \seq_count:N \g_@@_supervisors > 2

```

```

632 \uantwerpendocsprop{supervisorsname} #1
633 \else:
634 \if_int_compare:w \seq_count:N \g_@@_supervisors = 2
635 \uantwerpendocsprop{supervisorname} #1
636 \else:
637 \fi:
638 \fi:
639 }
640 </bmt | pt>
641 <*bmt>
642 \seq_new:N \g_@@_cosupervisors
643 \seq_new:N \g_@@_cosupervisorswithaffiliation
644 \cs_new:Nn \@@_addcosupervisor:nn {
645   \seq_gpush:Nn \g_@@_cosupervisors { #1 }
646   \seq_gpush:Nn \g_@@_cosupervisorswithaffiliation { #1,~#2 }
647 }
648 \NewDocumentCommand{\cosupervisor}{mm}{
649   \@@_addcosupervisor:nn { #1 } { #2 }
650 }
651 \NewDocumentCommand{\jointcosupervisors}{mm}{
652   \seq_use:Nnnn \g_@@_cosupervisors { #2 } { #1 } { #2 }
653 }
654 \NewDocumentCommand{\jointcosupervisorswithaffiliation}{mm}{
655   \seq_use:Nnnn \g_@@_cosupervisorswithaffiliation { #2 } { #1 } { #2 }
656 }
657 \NewDocumentCommand{\cosupervisorsname}{m}{
658   \if_int_compare:w \seq_count:N \g_@@_cosupervisors > 2
659   \uantwerpendocsprop{cosupervisorsname} #1
660   \else:
661   \if_int_compare:w \seq_count:N \g_@@_cosupervisors = 2
662   \uantwerpendocsprop{cosupervisorname} #1
663   \else:
664   \fi:
665   \fi:
666 }
667 \seq_new:N \g_@@_extsupervisors
668 \seq_new:N \g_@@_extsupervisorswithaffiliation
669 \cs_new:Nn \@@_addextsupervisor:nn {
670   \seq_gpush:Nn \g_@@_extsupervisors { #1 }
671   \seq_gpush:Nn \g_@@_extsupervisorswithaffiliation { #1,~#2 }
672 }
673 \NewDocumentCommand{\extsupervisor}{mm}{
674   \@@_addextsupervisor:nn { #1 } { #2 }
675 }
676 \NewDocumentCommand{\jointextsupervisors}{mm}{
677   \seq_use:Nnnn \g_@@_extsupervisors { #2 } { #1 } { #2 }
678 }
679 \NewDocumentCommand{\jointextsupervisorswithaffiliation}{mm}{
680   \seq_use:Nnnn \g_@@_extsupervisorswithaffiliation { #2 } { #1 } { #2 }
681 }
682 \NewDocumentCommand{\extsupervisorsname}{m}{
683   \if_int_compare:w \seq_count:N \g_@@_extsupervisors > 2
684   \uantwerpendocsprop{extsupervisorsname} #1
685   \else:

```

```

686 \if_int_compare:w \seq_count:N \g_@@_extsupervisors = 2
687 \uantwerpendocsprop{extsupervisorname} #1
688 \else:
689 \fi:
690 \fi:
691 }
692 </bmt>
693 <*pt>
694 \AtBeginDocument{
695 \seq_gpush:Nn \g_@@_supervisors {}
696 \seq_greverse:N \g_@@_supervisors
697 \seq_gpush:Nn \g_@@_supervisorswithaffiliation {}
698 \seq_greverse:N \g_@@_supervisorswithaffiliation
699 }
700 </pt>
701 <*bmt>
702 \AtBeginDocument{
703 \seq_gpush:Nn \g_@@_supervisors {}
704 \seq_greverse:N \g_@@_supervisors
705 \seq_gpush:Nn \g_@@_supervisorswithaffiliation {}
706 \seq_greverse:N \g_@@_supervisorswithaffiliation
707 \seq_gpush:Nn \g_@@_cosupervisors {}
708 \seq_greverse:N \g_@@_cosupervisors
709 \seq_gpush:Nn \g_@@_cosupervisorswithaffiliation {}
710 \seq_greverse:N \g_@@_cosupervisorswithaffiliation
711 \seq_gpush:Nn \g_@@_extsupervisors {}
712 \seq_greverse:N \g_@@_extsupervisors
713 \seq_gpush:Nn \g_@@_extsupervisorswithaffiliation {}
714 \seq_greverse:N \g_@@_extsupervisorswithaffiliation
715 }
716 </bmt>
717 <*bmt | pt>
718 \ExplSyntaxOff
719 </bmt | pt>

```

`\jurychairman` This macro sets the `\@jurychairman` tag that later will be used on the data page.

```

720 <*pt>
721 \newcommand*{\@jurychairman}{
722 \PackageError{uantwerpendocs}
723 {Please, define a chairman of the jury using the
724 '\protect\jurychairman{ }' command in the preamble of your
725 document.}
726 {See the uantwerpendocs manual}
727 }
728 \newcommand*{\@jurychairmanaff}{}
729 \newcommand*{\jurychairman}[2]{
730 \renewcommand*{\@jurychairman}{#1}\renewcommand*{\@jurychairmanaff}{#2}}
731 </pt>

```

`\jurymember` This macro allows for the registration of jury members and their affiliation. This can be done by invoking the macro as many times as needed. Note that as of v4.0 all jurymembers are specified using the same macro!

```

732 <*pt>
733 \ExplSyntaxOn
734 \seq_new:N \g_@@_jurymemberswithaffiliation
735 \cs_new:Nn \@@_addjurymember:nn {
736   \seq_gpush:Nn \g_@@_jurymemberswithaffiliation { #1,~#2 }
737 }
738 \NewDocumentCommand{\jurymember}{mm}{
739   \@@_addjurymember:nn { #1 } { #2 }
740 }
741 \NewDocumentCommand{\jointjurymembers}{m}{
742   \seq_use:Nn \g_@@_jurymemberswithaffiliation { #1 }
743 }
744 \AtBeginDocument{
745   \seq_greverse:N \g_@@_jurymemberswithaffiliation
746 }
747 \ExplSyntaxOff
748 </pt>

```

`\phdddegree` This macro has been discontinued. Use `\degree` instead.

```

749 <*pt>
750 \newcommand*\phdddegree{
751   \PackageError{uantwerpendocs}
752   {The '\protect\phdddegree{' macro is no longer available. Use
753     '\protect\degree{' instead}
754   {The interface of uantwerpendocs 4.0 has been changed. Use the
755     '\protect\degree' macro to specify your degree in full text (see
756     the uantwerpendocs manual)'}
757 }
758 </pt>
759 %
760 %
761 % \begin{macro}{\degree}
762 %   This macro sets the |\@degree| tag that later will
763 %   be used on the title pages.
764 %
765 %   \begin{macrocode}
766 <*bmt | pt | ct | ex>
767 \newcommand*\@degree{
768   \PackageError{uantwerpendocs}
769   {Please, specify the official degree description using
770     the '\protect\degree{' macro in the preamble of your document.}
771   {See the uantwerpendocs manual}
772 }
773 \newcommand*\degree[1]{\renewcommand*\@degree{#1}}
774 </bmt | pt | ct | ex>

```

`\bamadoctype` This macro sets the `\@bamadoctype` tag that later will be used on the title pages.

```

775 <*bmt | pt | ct | ex>
776 \newcommand*\@bamadoctype{
777   \PackageError{uantwerpendocs}
778   {Please, specify the official document type, either using

```

```

779 the '\protect\bamadoctype{}' macro or the '\protect\bamadegree{}'
780 macro in the preamble of your document.}
781 {See the uantwerpendocs manual}}
782 \newcommand*\bamadoctype[1]{
783 \renewcommand*\@bamadoctype{\uantwerpendocsdoctype{#1}}
784 }
785 </bmt | pt | ct | ex>

```

\bamadegree This macro sets the \@bamadoctype and \@degree tags that later will be used on the title pages.

```

786 <*bmt | pt | ct | ex>
787 \ExplSyntaxOn
788 \NewDocumentCommand{\bamadegree}{m}{
789 \seq_new:N \l_@@_degreechunks
790 \regex_extract_all:nnN { [^-]+ } { #1 } \l_@@_degreechunks
791 \bamadoctype{\seq_item:Nn\l_@@_degreechunks {2} - \seq_item:Nn\l_@@_degreechunks {3}}
792 \degree{\uantwerpendocsdegree{
793 \seq_item:Nn\l_@@_degreechunks {1} -
794 \seq_item:Nn\l_@@_degreechunks {2} -
795 \seq_item:Nn\l_@@_degreechunks {3} -
796 \seq_item:Nn\l_@@_degreechunks {4} }}
797 }
798 \ExplSyntaxOff
799 </bmt | pt | ct | ex>

```

\programme This macro is no longer in use.

```

800 <*ct | pt | ex>
801 \newcommand*\{programme}[3]{
802 \PackageError{uantwerpendocs}
803 {The '\protect\programme{}{}{}' macro is no longer available. Use
804 '\protect\degree{}' instead}
805 {The interface of uantwerpendocs 4.0 has been changed. Use the
806 '\protect\degree' macro to specify your degree in full text (see
807 the uantwerpendocs manual)}'
808 }
809 </ct | pt | ex>

```

\course For the coursetext class, this macro sets one or more courses. and \@course tags that later will be used on the title page. Note that as of v4.0 all courses are specified using the same macro!

```

810 <*ct>
811 \newcommand*\coursei[2]{
812 \PackageError{uantwerpendocs}
813 {The '\protect\coursei{}' macro is no longer available. Use
814 '\protect\course{}' instead (multiple times if you need to)}
815 {The interface of uantwerpendocs 4.0 has been changed. Use the
816 '\protect\course macro instead of the \protect\coursei,
817 \protect\courseii, \protect\courseiii and \protect\courseiv macros
818 that existed earlier (see
819 the uantwerpendocs manual)}'

```

```

820 }
821 \ExplSyntaxOn
822 \seq_new:N \g_@@_courseswithcodes
823 \cs_new:Nn \@@_addcourse:nn {
824   \seq_gpush:Nn \g_@@_courseswithcodes{ \texttt{#1}~#2 }
825 }
826 \NewDocumentCommand{\course}{mm}{
827   \@@_addcourse:nn { #1 } { #2 }
828 }
829 \NewDocumentCommand{\jointcourseswithcodes}{m}{
830   \seq_use:Nn \g_@@_courseswithcodes { #1 }
831 }
832 \AtBeginDocument{
833   \seq_greverse:N \g_@@_courseswithcodes
834 }
835 \ExplSyntaxOff
836 \</ct>

```

For the `exam` class (assuming that an exam only holds for a single course), the situation is simple and we assume only a single coursecode and course name.

```

837 \<ex>
838 \newcommand*{\@coursecode}{}
839 \newcommand*{\@course}{}
840 \newcommand*{\course}[2]{
841   \renewcommand*{\@coursecode}{#1}
842   \renewcommand*{\@course}{#2}
843 }
844 \</ex>

```

`\diploma` This macro sets the official diploma description into the `\@diploma` tag that later will be used on the title page.

```

845 \<bmt | pt>
846 \newcommand*{\diploma}[1]{
847   \PackageError{uantwerpendocs}
848   {The '\protect\diploma{}' macro is no longer available. Use
849     '\protect\degree{}' instead}
850   {The interface of uantwerpendocs 4.0 has been changed. Use the
851     '\protect\degree' macro to specify your degree in full text (see
852     the uantwerpendocs manual)}
853 }
854 \</bmt | pt>

```

`\defensedate` This macro sets the `\@defensedate` tags that later will be used on the title page.

```

855 \<pt>
856 \newcommand*\@defensedate{ERROR}
857 \newcommand*{\defensedate}[1]{\renewcommand*\@defensedate{#1}}
858 \</pt>

```

`\defenselocation` This macro sets the `\@defenselocation` tags that later will be used on the title page.

```

859 <*pt>
860 \newcommand*\@defenselocation{Antwerpen}
861 \newcommand*\@defenselocation[1]{\renewcommand*\@defenselocation{#1}}
862 </pt>

```

\titeplageimage This macro sets the \@titlepageimage tags that later will be used on the title page, to include the graphics.

```

863 <*ct | pt | rp>
864 \newcommand*\@titlepageimage{}
865 \newcommand*\@titlepageimage[1]{\renewcommand*\@titlepageimage{#1}}
866 </ct | pt | rp>

```

\isbn This macro sets the \@isbn tags that later will be used on the data page. If you don't have an ISBN number, just don't specify one (i.e. don't use this macro).

```

867 <*pt>
868 \newcommand*\@isbn{}
869 \newcommand*\@isbn[1]{\renewcommand*\@isbn{#1}}
870 </pt>

```

\depot This macro sets the \@depot tags that later will be used on the data page. If you don't have a depot number, just don't specify one (i.e. don't use this macro).

```

871 <*pt>
872 \newcommand*\@depot{}
873 \newcommand*\@depot[1]{\renewcommand*\@depot{#1}}
874 </pt>

```

\academicyear This macro sets the \@academicyear tag that later will be used on the title page.

```

875 <*ct | bmt | ex>
876 \newcommand*\@academicyear{XXX-YYYY}
877 \newcommand*\@academicyear[1]{\renewcommand*\@academicyear{#1}}
878 </ct | bmt | ex>

```

\copyrightnotices This macro sets the \@copyrightnotices tag that later will be used on the back of the title page.

```

879 <*ct | rp>
880 \newcommand*\@copyrightnotices{}
881 \newcommand*\@copyrightnotices[1]{\renewcommand*\@copyrightnotices{#1}}
882 </ct | rp>
883 <*bmt>
884 \newcommand*\@copyrightnotices{\disclaimer{\@bamadoctype}}
885 </bmt>

```

\sender This macro sets the \@sender and \@senderrole tags that will be used in the letter's heading text.

```

886 <*le>
887 \newcommand*\@sender{< Specify sender using

```



```

888 \textbackslash{}sender\{name\}\{role\} >}
889 \newcommand*{\@senderrole}{~}
890 \newcommand*{\sender}[2]{\renewcommand*{\@sender}{#1}\renewcommand*{\@senderrole}{#2}}
891 \le

```

\logo This macro sets the \@logo tag that will be used to load a graphics file with that name.

```

892 \le | ex
893 \newcommand*{\logo}[1]{\renewcommand*{\@logo}{#1}}
894 \le | ex

```

\unit This macro sets the \@unit tag that will be used in the letter's heading text.

```

895 \le
896 \newcommand*{\@unit}{}
897 \newcommand*{\unit}[1]{\renewcommand*{\@unit}{#1}}
898 \le

```

\email This macro sets the \@emailuser and \@emaildomain tags that will be used in the letter's heading text. This split construction was used to overcome problems with the @ sign.

```

899 \le
900 \newcommand*{\@emailuser}{}
901 \newcommand*{\@emaildomain}{}
902 \newcommand*{\email}[2]{\renewcommand*{\@emailuser}{#1}\renewcommand*{\@emaildomain}{#2}}
903 \le

```

\phone This macro sets the \@phone tag that will be used in the letter's heading text.

```

904 \le
905 \newcommand*{\@phone}{}
906 \newcommand*{\phone}[1]{\renewcommand*{\@phone}{#1}}
907 \le

```

\fax This macro sets the \@fax tag that will be used in the letter's heading text.

```

908 \le
909 \newcommand*{\@fax}{}
910 \newcommand*{\fax}[1]{\renewcommand*{\@fax}{#1}}
911 \le

```

\mobile This macro sets the \@mobile tag that will be used in the letter's heading text.

```

912 \le
913 \newcommand*{\@mobile}{}
914 \newcommand*{\mobile}[1]{\renewcommand*{\@mobile}{#1}}
915 \le

```

\returnaddress This macro sets the \@returnaddress tag that will be used in the letter's heading text (in the area of the envelope's window).

```

916 (*le)
917 \newcommand*{\@returnaddress}{<specify return-address using \textbackslash\{single-
    line-return-address\}>}
918 \renewcommand*{\returnaddress}[1]{\renewcommand*{\@returnaddress}{#1}}
919 (/le)

```

\to This macro sets the \@to tag that will be used in the letter's heading text (in the area of the envelope's window).

```

920 (*le)
921 \newcommand*{\@to}{<Specify addressee using \textbackslash{}to\{name\}>}
922 \renewcommand*{\to}[1]{\renewcommand*{\@to}{#1}}
923 (/le)

```

\toorganization This macro sets the \@toorganization tag that will be used in the letter's heading text (in the area of the envelope's window).

```

924 (*le)
925 \newcommand*{\@toorganization}{<Specify organization using
926   \textbackslash{}toorganization\{\}>}
927 \newcommand*{\toorganization}[1]{\renewcommand*{\@toorganization}{#1}}
928 (/le)

```

\toaddress This macro sets the \@toaddress tag that will be used in the letter's heading text (in the area of the envelope's window).

```

929 (*le)
930 \newcommand*{\@toaddress}{<Specify (multiline) destination
931   address\\using \textbackslash{}toaddress\{\}>}
932 \newcommand*{\toaddress}[1]{\renewcommand*{\@toaddress}{#1}}
933 (/le)

```

\subject This macro sets the \@subject tag that will be used in the letter's heading text.

```

934 (*le)
935 \newcommand*{\@subject}{-}
936 \newcommand*{\subject}[1]{\renewcommand*{\@subject}{#1}}
937 (/le)

```

\opening This macro is much a do about nothing, but I prefer to do it this way for historic reasons.

```

938 (*le)
939 \renewcommand*{\opening}[1]{#1}
940 (/le)

```

\closing This macro sets the \@closing tag that will be used to finish the letter.

```

941 (*le)
942 \newcommand*{\@closing}{<specify a closing formula using
943   \textbackslash{}closing\{\}>}
944 \renewcommand*{\closing}[1]{\renewcommand*{\@closing}{#1}}
945 (/le)

```

`\signature` This macro sets the `\@signature` tag that will be used to finish the letter. By default this corresponds to a decent amount of vertical white space

```
946 (*le)
947 \newcommand*\@signature{}\vspace*{8ex}}
948 \renewcommand*\signature}[1]{\renewcommand*\@signature}{#1}}
949 (/le)
```

`\carboncopy` This macro will set the `\@carboncopy` tag that will be used in the trailer of the letter.

```
950 (*le)
951 \newcommand*\@carboncopy{}
952 \newcommand*\carboncopy}[1]{\renewcommand*\@carboncopy}{#1}}
953 (/le)
```

`\enclosed` This macro will set the `\@enclosed` tag that will be used in the trailer of the letter.

```
954 (*le)
955 \newcommand*\@enclosed{}
956 \newcommand*\enclosed}[1]{\renewcommand*\@enclosed}{#1}}
957 (/le)
```

`\address` This macro will set the `\@address` tag that will be used in the letter's heading text (in the area of the envelope's window).

```
958 (*pt | rp | le)
959 \newcommand*\@address{
960   \PackageError{uantwerpendocs}
961   {Please, set your multi-line address and contact details using the
962     '\protect\address{}' command in the preamble of your document}
963   {See the uantwerpendocs manual}
964 }
965 (/pt | rp | le)
966 %
967 (pt | rp)\newcommand*\address}[1]{\renewcommand*\@address}{#1}}
968 (le)\renewcommand*\address}[1]{\renewcommand*\@address}{#1}}
969 %   \end{\macrocode}
970 % \end{macro}
971 %
972 % \begin{macro}{\exampart}
973 %   This macro will set the |\@examgropunumber| tag that will be used on
974 %   the exam title page.
975 %   \begin{macrocode}
976 (*ex)
977 \newcommand*\@exampart{}
978 \newcommand*\exampart}[1]{\renewcommand*\@exampart}{#1}}
979 (/ex)
```

`\examgroupnumber` This macro will set the `\@examgroupnumber` tag that will be used on the exam title page.

```

980 <*ex>
981 \newcommand*{\@examgroupnumber}{-}
982 \newcommand*{\examgroupnumber}[1]{\renewcommand*{\@examgroupnumber}{#1}}
983 </ex>

```

\examdate This macro will set the \@examdate tag that will be used on the exam title page.

```

984 <*ex>
985 \newcommand*{\@examdate}{TBD}
986 \newcommand*{\examdate}[1]{\renewcommand*{\@examdate}{#1}}
987 </ex>

```

\examlength This macro will set the \@examlength tag that will be used on the exam title page.

```

988 <*ex>
989 \newcommand*{\@examlength}{TBD}
990 \newcommand*{\examlength}[1]{\renewcommand*{\@examlength}{#1}}
991 </ex>

```

\tstart This macro will set the \@tstart tag that will be used on the exam title page.

```

992 <*ex>
993 \newcommand*{\@tstart}{TBD}
994 \newcommand*{\tstart}[1]{\renewcommand*{\@tstart}{#1}}
995 </ex>

```

\tend This macro will set the \@tend tag that will be used on the exam title page.

```

996 <*ex>
997 \newcommand*{\@tend}{TBD}
998 \newcommand*{\tend}[1]{\renewcommand*{\@tend}{#1}}
999 </ex>

```

\room This macro will set the \@rooms tag that will be used on the exam title page.

```

1000 <*ex>
1001 \ExplSyntaxOn
1002 \seq_new:N \g_@@_rooms
1003 \cs_new:Nn \@@_addroom:n {
1004   \seq_gpush:Nn \g_@@_rooms { #1 }
1005 }
1006 \NewDocumentCommand{\room}{m}{
1007   \@@_addroom:n { #1 }
1008 }
1009 \NewDocumentCommand{\jointrooms}{m}{
1010   \seq_use:Nn \g_@@_rooms { #1 }
1011 }
1012 \NewDocumentCommand{\roomsname}{-}{
1013   \if_int_compare:w \seq_count:N \g_@@_rooms > 1
1014     \antwerpendocsprop{roomsname}
1015   \else:
1016     \antwerpendocsprop{roomname}

```

```

1017 \fi:
1018 }
1019 \AtBeginDocument{
1020 \seq_greverse:N \g_@@_rooms
1021 }
1022
1023 \ExplSyntaxOff
1024 \</ex>

```

\extrainfo This macro will set the `\@extrainfo` tag that will be used on the back of the exam title page. When as (optional) first argument 'firstpage' is given, the extra info will start on the first page below the title block. In that case, we assume that conservation of space is your concern, so the extra info will also not be terminated with a 'clearpage'. If no optional first argument is given (or the default 'separatepage' is given), the extra info will start on a new page and will be terminated by a clearpage.

```

1025 \<ex>
1026 \newcommand{\@extrainfo}{}
1027 \newcommand\extrainfo[2][separatepage]{
1028 \ifthenelse{\equal{#1}{separatepage}}{
1029 % then
1030 \renewcommand{\@extrainfo}{\clearpage #2 \clearpage}
1031 }
1032 {
1033 % else
1034 \ifthenelse{\equal{#1}{firstpage}}{
1035 {
1036 \renewcommand{\@extrainfo}{#2}
1037 }
1038 {
1039 \PackageError{uantwerpendocs}
1040 {The first (optional) argument of '\protect\extrainfo' can
1041 only be 'separatepage' or 'firstpage'}
1042 {See the uantwerpendocs manual}'
1043 }
1044 }
1045 }
1046 \</ex>

```

\studentnr This macro will set the `\@studentnr` tag that will be used in the header of the pages.

```

1047 \<ex>
1048 \newcommand*\@studentnr{}
1049 \newcommand*\studentnr[1]{\renewcommand*\@studentnr{#1}}
1050 \</ex>

```

6.16 Dirty reverse video tricks

```

1051 \<bmt>
1052 \ExplSyntaxOn

```

```

1053 \seq_new:N \l_title_seq
1054 \cs_generate_variant:Nn \seq_set_split:Nnn { Nnf }
1055 \cs_new_nopar:Npn \@@_reversevideo:f #1
1056 {
1057   \seq_set_split:Nnf \l_title_seq {~} { #1 }
1058   \seq_set_map:Nnn \l_title_seq \l_title_seq {\@quantwerpendocshl{##1}}
1059   \seq_use:Nnnn \l_title_seq { ~ } { ~ } { ~ }
1060 }
1061 \NewDocumentCommand{\reversevideo}{m}{
1062   \@@_reversevideo:f { #1 }
1063 }
1064 \ExplSyntaxOff
1065 \</bmt>

```

6.17 Header and Footer

The `fancyhdr` package is used to make a decent header and footer. The header and footer of the `coursetext` class are defined to be:

```

1066 \< *ct>
1067 \if@twoside
1068 \lhead[\thepage]{\slshape\rightmark}
1069 \chead[]{}
1070 \rhead[\slshape\leftmark]{\thepage}
1071 \lfoot[\uantwerpendocsprop{org-ua} -- \@facultyacronym]{\@courseversion}
1072 \cfoot[]{}
1073 \rfoot[]{\@title{}\ifdefvoid{\@subtitle}{\@}{ --- \@subtitle}}
1074 \else
1075 \lhead[]{\leftmark}
1076 \chead[]{}
1077 \rhead[]{\thepage}
1078 \lfoot[]{\@courseversion}
1079 \cfoot[]{\UAntwerpen--\@facultyacronym}
1080 \rfoot[]{\@title{}}
1081 \fi
1082 \</ct>

```

The header and footer of the `bamathesis` class are defined to be:

```

1083 \< *bmt>
1084 \AtBeginDocument{
1085   \setlength{\headheight}{13.7pt}
1086   \renewcommand*{\headrulewidth}{0pt}
1087   \renewcommand*{\footrulewidth}{0pt}
1088   \newsavebox\smallogo
1089   \savebox\smallogo{\raisebox{-1ex}{\includegraphics[width=2.5cm]{\logopos}}}
1090   \if@twoside
1091     \lhead[]{\footnotesize\slshape\rightmark}
1092     \chead[]{}
1093     \rhead[\footnotesize\slshape\leftmark]{}
1094     \lfoot[\footnotesize\thepage~\textcolor{maincolor}{\textbf{}}]{\usebox\smallogo}
1095     \cfoot[\footnotesize\@bamadoctype]{\footnotesize\@bamadoctype}
1096     \rfoot[\usebox\smallogo]{\footnotesize\textcolor{maincolor}{\textbf{}}~\thepage}
1097   \else

```

```

1098 \lhead[]{\footnotesize\slshape\leftmark}
1099 \chead[]{}
1100 \rhead[]{}
1101 \lfoot[]{\usebox\smalllogo}
1102 \cfoot[]{\footnotesize\@bamadotype}
1103 \rfoot[]{\footnotesize\textcolor{maincolor}{\textbf{||}}~\thepage}
1104 \fi
1105 \fancypagestyle{plain}{\pagestyle{fancy}}
1106 % \patchcmd{\chapter}{\thispagestyle{plain}}{\thispagestyle{fancy}}{}{}
1107 }
1108 </bmt>

```

The header and footer of the `phdthesis` and `report` are defined to be:

```

1109 < *pt | rp >
1110 \if@twoside
1111 \lhead[\thepage]{\slshape\rightmark}
1112 \chead[]{}
1113 \rhead[\slshape\leftmark]{\thepage}
1114 \lfoot[]{}
1115 \cfoot[]{}
1116 \rfoot[]{}
1117 \else
1118 \lhead[]{\leftmark}
1119 \chead[]{}
1120 \rhead[]{\thepage}
1121 \lfoot[]{}
1122 \cfoot[]{}
1123 \rfoot[]{}
1124 \fi
1125 </pt | rp >

```

The header and footer of the `letter` class are defined to be:

```

1126 < *le >
1127 \lhead[]{}
1128 \chead[]{}
1129 \rhead[]{}
1130 \lfoot[\small\textcolor{gray}{\@date}]{\textcolor{gray}{\@date}}
1131 \cfoot[]{}
1132 \rfoot[\small\textcolor{gray}{\pagename~\thepage~\uantwerpendocsprop{of}~\pageref{lastpage}}]
1133 {\small\textcolor{gray}{\pagename~\thepage~\uantwerpendocsprop{of}~\pageref{lastpage}}}
1134 </le >

```

The header and footer of the `exam` class are defined to be:

```

1135 < *ex >
1136 \lhead[]{}
1137 \chead[]{}
1138 \cfoot[\small \thepage/\pageref{lastpage}]{\small \thepage/\pageref{lastpage}}
1139 \if@examiner
1140 \rhead[\small EXAMINER VERSION]{\small EXAMINER VERSION}
1141 \AddToShipoutPicture{
1142 \put(60,40){\rotatebox{60}{\textcolor{watermark}{
1143 \fontfamily{phv}\fontsize{105}{130}\fontseries{m}\fontshape{n}%

```

```

1144         \selectfont Examiner Version}}}}
1145 \else
1146 \rhead[\small Student nr. \@studentnr]{\small Student nr. \@studentnr}
1147 \fi
1148 \ex>

```

Some common code remains:

```

1149 <*ct>
1150 \setlength{\headheight}{13.7pt}
1151 \renewcommand*{\headrulewidth}{1pt}
1152 \renewcommand*{\footrulewidth}{1pt}
1153 \pagenumbering{arabic}
1154 \ct>
1155 <*pt | rp | le>
1156 \setlength{\headheight}{13.7pt}
1157 \renewcommand*{\headrulewidth}{0pt}
1158 \renewcommand*{\footrulewidth}{0pt}
1159 \pt | rp | le>
1160 <*ex>
1161 \setlength{\headheight}{13.7pt}
1162 \renewcommand*{\headrulewidth}{0pt}
1163 \ex>

```

Remains to take care of filling

```

1164 <*ct | mt | pt | rp | le>
1165 \if@filled\else
1166   \raggedright
1167 \fi
1168 \raggedbottom
1169 \onecolumn
1170 \ct | mt | pt | rp | le>

```

6.18 Copyright notice

`\@crnotice` This is the standard text that will be used for the `\@crnotice` tag.

```

1171 <*ct | rp>
1172 \newcommand{\@crnotice}{
1173   This document has been typeset using \LaTeX{} and the
1174   \texttt{uantwerpendocs} package.\@
1175   \@copyrightnotices
1176
1177 \ct | rp>
1178 <ct>   \@courseversion
1179 <*ct | rp>
1180
1181   CONFIDENTIAL AND PROPRIETARY.
1182
1183   \copyright{} \@versionyear{} \uantwerpendocsprop{org-ua}, \uantwerpendocsprop{arr}.
1184 }
1185 \ct | rp>

```



```

1186 <*bmt>
1187 \newcommand{\@crnotice}{
1188   \@copyrightnotices
1189 }
1190 </bmt>

```

6.19 Fancy chapter headers for the phdthesis and report class

```

1191 <*pt | rp>
1192 \def\@makechapterhead#1{%
1193   \vspace*{1ex}%
1194   \begin{flushright}
1195     \makebox[0pt][l]{\rule[-0.4em]{10cm}{1.8em}}\textcolor{white}
1196     {\LARGE\textbf{~\chaptername~}}
1197     \raisebox{-24pt}{
1198       \begin{tikzpicture}
1199         \foreach \theta in {0,5,...,355} {
1200           \node[color=white] at (\theta:0.025)
1201             {\fontsize{72}{12}\selectfont\textbf{\thechapter}};
1202         }
1203         \node[color=gray] at (0,0)
1204           {\fontsize{72}{12}\selectfont\textbf{\thechapter}};
1205       \end{tikzpicture}
1206     }\hspace*{-8pt}
1207     \par\nobreak
1208     \interlinepenalty\@M
1209     \huge\textbf{\textcolor{darkgray}{\rule[-0.5ex]{0em}{2.6ex}~#1}}
1210     \par\nobreak
1211   \end{flushright}
1212   \rule{\textwidth}{1pt}
1213   \vspace{5\p@\par\nobreak
1214 }
1215 \def\@schapter#1{%
1216   \@makeschapterhead{#1}%
1217   \@afterheading
1218 }
1219 \def\@makeschapterhead#1{%
1220   \vspace*{1ex}%
1221   \begin{flushright}
1222     \LARGE\textbf{\textcolor{darkgray}{\rule[-0.5ex]{0em}{2.6ex}~#1}}
1223   \end{flushright}
1224   \rule{\textwidth}{1pt}
1225   \vspace{5\p@\par
1226 }
1227 % overwrite appendix
1228 \def\appendix{
1229   \setcounter{chapter}{0}
1230   \renewcommand*{\thechapter}{\Alph{chapter}}
1231   \renewcommand*{\chaptername}{appendixname}
1232 }
1233 </pt | rp>

```

6.20 Fancy chapter headers for the bamathesis class

```

1234 \*bmt>
1235 \addtokomafont{section}{\color{basecolor}}
1236 \addtokomafont{chapter}{\color{basecolor}}
1237 \bmt>

```

6.21 Title page for the masterthesis and coursetext classes

The title page is generated using the `\maketitle` command. As the book class from which we inherit already defines this command, we need to renew it.

`\maketitle` The macro for the coursetext class:

```

1238 \*ct>
1239 \renewcommand\maketitle{%
1240   \pagestyle{empty}
1241   \begin{titlepage}
1242     \AddToShipoutPicture*{%
1243       \put(0,0){%
1244         \if@modern
1245           \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1246             \clip (0,0) rectangle(\paperwidth,\paperheight);
1247
1248             \begin{scope}
1249               \clip (2.125,20.192) rectangle (\paperwidth,6);
1250               \fill[sidecolor]
1251                 (2.125,20.192) rectangle (\paperwidth,6);
1252               \node[anchor=south west]
1253                 at (2.125,6)
1254                 {\ifx\@titlepageimage\@empty
1255                  \else
1256                    \includegraphics[keepaspectratio,
1257                      scale=0.01,
1258                      min size={18.875cm}{14.192cm}]{\@titlepageimage}
1259                  \fi};
1260             \end{scope}
1261
1262             \node
1263               [anchor=west,text width=13.75cm,align=left,font=\Huge,uauaside]
1264               at (2.125,27)
1265               {
1266                 \textsf{\textbf{\@title}}
1267               };
1268
1269             \node
1270               [anchor=west,text width=13.75cm,align=left,font=\Large,uauaside]
1271               at (2.125,25.5)
1272               {
1273                 \textsf{\textbf{\@subtitle}}
1274               };
1275             };
1276

```

```

1277 \node
1278 [anchor=base west,maincolor,text width=13.75cm,align=left,font=\LARGE]
1279 at (2.125,24)
1280 {\textsf{\textbf{\@author}}};
1281
1282
1283 \node
1284 [anchor=west,text width=13.75cm,align=left,font=\large,uauaside]
1285 at (2.125,22)
1286 {\textsf{\jointcourseswithcodes{\}}};
1287
1288 \fill[maincolor] (2.125,6)
1289 -- (\paperwidth,6)
1290 -- (\paperwidth,2.625)
1291 -- (2.55,2.625)
1292 arc (-90:-180:0.425)
1293 -- cycle;
1294
1295 \node[white,anchor=west,align=left,font=\large]
1296 (SN) at (2.55,5.1)
1297 {
1298 \begin{tabular}{@{}l@{~\,},p{14.5cm}}
1299 \textsf{\lecturersname}
1300 & \textsf{\textbf{\jointlecturers{ | }}}
1301 \end{tabular}
1302 };
1303
1304 \node[white,anchor=west,text width=17.5cm,align=left,font=\small]
1305 at (2.55,3.7)
1306 {\textsf{\@degree}}\
1307 \textsf{\textbf{\@faculty{ } | \@academicyear \hfill
1308 \@publishercode}}\
1309 \textsf{\@publisher}};
1310
1311 \node[anchor=west] at (2.125,1.313)
1312 {\includegraphics[width=4.75cm]{\logopos}};
1313 \end{tikzpicture}
1314 \else
1315 \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1316 \clip (0,0) rectangle(\paperwidth,\paperheight);
1317 \if@cameraready
1318 \else
1319 \fill[uauamain] (0,29.7) -- (2.2,29.7) -- (2.2,21.435) arc
1320 (0:-90:0.235) -- (0,21.2) -- cycle;
1321 \node[anchor=west] at (2.2,1.8)
1322 {\includegraphics[width=5.2cm]{\logoposua}};
1323 \fi
1324
1325 \node
1326 [anchor=north west,text width=14.75cm,align=left]
1327 at (5,27.1)
1328 {
1329 \fontsize{16}{20}\selectfont\textsf{\textbf{\uantwerpendocsprop{acyearname}}}\
1330 \fontsize{16}{20}\selectfont\textsf{\@academicyear}

```

```

1331     };
1332
1333     \node
1334     [anchor=north west,text width=14.75cm,align=left]
1335     at (5,22.7)
1336     {
1337         \fontsize{16}{20}\selectfont\textsf{\@faculty}
1338     };
1339
1340     \node
1341     [anchor=north west,text width=14.75cm,align=left] (title)
1342     at (5,20.9)
1343     {
1344         \fontsize{24}{30}\selectfont\textsf{\textbf{\@title}}\\[1ex]
1345         \fontsize{18}{24}\selectfont\textsf{\@subtitle}
1346     };
1347
1348     \node
1349     [anchor=north west,below=of title,
1350     text width=14.75cm,align=left,
1351     yshift=-0.5cm]
1352     {
1353         \fontsize{12}{15}\selectfont{\textsf{\@degree}}
1354     };
1355
1356     \node
1357     [anchor=north west,text width=14.75cm,align=left] (title)
1358     at (5,13.3)
1359     {
1360         \fontsize{12}{15}\selectfont\textsf{\textbf{\jointlecturers{\\}}}
1361     };
1362
1363     \node
1364     [anchor=north west,text width=14.75cm,align=left] (title)
1365     at (5,10)
1366     {
1367         \fontsize{12}{15}\selectfont\textsf{\jointcourseswithcodes{\\}}
1368     };
1369
1370     \node[anchor=east]
1371     at (19,1.8)
1372     {
1373         \fontsize{12}{15}\selectfont\textsf{\@publishercode}
1374     };
1375
1376     \end{tikzpicture}
1377     \fi
1378 }
1379 }
1380 \end{titlepage}%
1381 ~\par\relax
1382 \clearpage
1383 \if@copyright
1384 \backgroundsetup{contents={Copyright University of Antwerp, All

```

```

1385      Rights Reserved}}
1386 \fi
1387 \vspace*{\stretch{1}}
1388 \@crnotice
1389 \clearpage
1390 \setcounter{footnote}{0}%
1391 \global\let\thanks\relax
1392 \global\let\maketitle\relax
1393 \global\let\@thanks\@empty
1394 \global\let\title\relax
1395 \global\let\author\relax
1396 \global\let\date\relax
1397 \global\let\and\relax
1398 \pagestyle{fancy}
1399 \thispagestyle{empty}
1400 }
1401 </ct>

```

`\makefinalpage` Below, one can find the code for the final page of the `coursetext` class:

```

1402 <*ct>
1403 \newcommand\makefinalpage{
1404   \if@cameraready
1405   \else
1406     \cleardoublepage
1407     \thispagestyle{empty}
1408     \if@copyright\NoBgThispage\fi
1409     ~% intentionally blank page
1410     \clearpage
1411     \thispagestyle{empty}
1412     \if@copyright\NoBgThispage\fi
1413     \AddToShipoutPicture*{%
1414       \put(0,0){%
1415         \if@modern
1416           \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1417             \clip (0,0) rectangle(\paperwidth,\paperheight);
1418             \fill[sidecolor] (0,0) rectangle (2.125cm,2.625cm);
1419           \end{tikzpicture}
1420         \else
1421           \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1422             \clip (0,0) rectangle(\paperwidth,\paperheight);
1423             \fill[uauamain] (0,21.2) rectangle (21,29.7);
1424           \end{tikzpicture}
1425         \fi
1426       }
1427     }
1428     ~
1429   \fi
1430 }
1431 </ct>

```

`\maketitle` And next, the code for the title page of the `bamathesis` class:

```

1432 <*bmt>

```

```

1433 \renewcommand\maketitle{%
1434   \pagestyle{empty}
1435   \begin{titlepage}
1436     \AddToShipoutPicture*{%
1437       \put(0,0){%
1438         \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1439           \clip (0,0) rectangle(\paperwidth,\paperheight);
1440           \node
1441             [anchor=north east,align=right]
1442             at (\paperwidth-1.6cm,\paperheight-2.6cm)
1443             {\bfseries\large
1444              \uantwerpendocsprop{acyearname}\ [.75ex]\Large\@academicyear};
1445           \node (title)
1446             [anchor=north west,align=left,
1447              text width={\paperwidth-5.1cm},font=\Huge,text=white,
1448              xshift=1pt]
1449             at (3.5cm,\paperheight-6.4cm)
1450             {\sethlcolor{maincolor}%
1451              \textsf{\textbf{\reversevideo{\@title}}}\
1452              \textsf{\reversevideo{\@subtitle}}};
1453           \node
1454             [anchor=north west,font=\LARGE,yshift=-1cm,xshift=-1pt]
1455             at (title.south west)
1456             {%
1457              \textsf{\textbf{\@author}}
1458             };
1459
1460           \node
1461             [anchor=west,align=left,
1462              text width={\paperwidth-5.1cm},font=\normalsize]
1463             at (3.5cm,12cm)
1464             {\textsf{\@bamadoctype}\
1465              \textsf{\textbf{\@degree}}
1466             };
1467
1468           \node
1469             [anchor=west,align=left,
1470              text width={\paperwidth-5.1cm},font=\normalsize]
1471             at (3.5cm,7.5cm)
1472             {\supervisorsname{\
1473              \textbf{\jointsupervisorswithaffiliation{\}\{~\}\~\}}%
1474              \cosupervisorsname{\
1475              \textbf{\jointcosupervisorswithaffiliation{\}\{~\}\~\}}%
1476              \extsupervisorsname{\
1477              \textbf{\jointextsupervisorswithaffiliation{\}\{\}}
1478             };
1479
1480           \ifx\@companylogo\empty
1481           \else
1482           \node[anchor=south east] at
1483             (\pagewidth-1.6cm,1.5cm)
1484             {\@companylogo};
1485           \fi
1486

```

```

1487
1488         \node[anchor=south west] at
1489             (1.6cm,1.5cm)
1490             {\includegraphics[width=6.2cm]{\logopos}};
1491     \end{tikzpicture}
1492 }
1493 }
1494 \end{titlepage}%
1495 ~\par\relax
1496 \clearpage
1497 \vspace*{\stretch{1}}
1498 \@crnotice
1499 \clearpage
1500 \setcounter{footnote}{0}%
1501 \global\let\thanks\relax
1502 \global\let\maketitle\relax
1503 \global\let\@thanks\@empty
1504 \global\let\title\relax
1505 \global\let\author\relax
1506 \global\let\date\relax
1507 \global\let\and\relax
1508 \pagestyle{fancy}
1509 \thispagestyle{empty}
1510 }
1511 </bmt>

```

\makefinalpage Below, one can find the code for the final page of the **bamathesis** class:

```

1512 <*bmt>
1513 \newcommand\makefinalpage{
1514 }
1515 </bmt>

```

6.22 Title page for the **phdthesis** classes

The title page is generated using the **\maketitle** command. As the book class from which we inherit already defines this command, we need to renew it.

\maketitle Below, one can find the code for the title page of the **phdthesis** class:

```

1516 <*pt>
1517 \renewcommand\maketitle{%
1518     \pagestyle{empty}
1519     \begin{titlepage}
1520         \AddToShipoutPicture*{%
1521             \put(0,0){%
1522                 \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1523                     \useasboundingbox (0,0) rectangle(\paperwidth,\paperheight);
1524                     \fill[lightgray]
1525                         (2.125,19) rectangle (\paperwidth+3mm,6);
1526                     \begin{scope}
1527                         \clip (2.125,19) rectangle (\paperwidth+3mm,6);

```

```

1528         \node[anchor=south west]
1529         at (2.125,6)
1530         {\ifx\@titlepageimage\@empty
1531          \else
1532           \includegraphics[keepaspectratio,
1533            scale=0.01,
1534            min size={16.175cm}{13cm}]{\@titlepageimage}
1535          \fi};
1536     \end{scope}
1537
1538     \node
1539     [anchor=west,text width=13.75cm,align=left,font=\Huge,uauaside]
1540     at (2.125,23.5)
1541     {
1542       \textsf{\textbf{\@title}}
1543     };
1544
1545     \node
1546     [anchor=west,text width=13.75cm,align=left,font=\Large,uauaside]
1547     at (2.125,21.5)
1548     {
1549       \textsf{\textbf{\@subtitle}}
1550     };
1551
1552     \node
1553     [anchor=base west,maincolor,
1554     text width=13.75cm,align=left,font=\LARGE]
1555     at (2.125,20)
1556     {\textsf{\textbf{\@author}}};
1557
1558     \fill[maincolor] (2.125,6)
1559     -- (\paperwidth+3mm,6)
1560     -- (\paperwidth+3mm,2.625)
1561     -- (2.55,2.625)
1562     arc (-90:-180:0.425)
1563     -- cycle;
1564
1565     \node[white,anchor=west,align=left,font=\large]
1566     (SN) at (2.55,4.9)
1567     {
1568       \begin{tabular}{@{}l@{~},}p{11.5cm}}
1569         \textsf{\supervisorsname{}}
1570         & \textsf{\textbf{\jointsupervisors{ | }{}}}
1571       \end{tabular}
1572     };
1573
1574
1575     \node[white,anchor=west,text width=14.5cm,align=left,font=\small]
1576     at (2.55,3.7)
1577     {\textsf{\uantwerpendocsprop{pthesisnamei}
1578       \@degree{}}\}
1579     \textsf{\textbf{\@faculty{
1580       | \@defenselocation, \@defensedate}}}};
1581

```



```

1582         \node[anchor=west] at
1583         (2.125,1.313)
1584         {\includegraphics[width=4.75cm]{\logoposua}};
1585     \end{tikzpicture}
1586 }
1587 }
1588 \end{titlepage}%
1589 ~\par\relax
1590 \cleardoublepage
1591 \begin{center}
1592     \includegraphics[width=4.75cm]{\logoposua}
1593     \vfill
1594     \@faculty\\
1595     \@degree\par
1596     \vfill
1597     \Huge\textsf{\@title}\par
1598     \large\textsf{\@subtitle}\par
1599     \vfill
1600     \normalsize\uantwerpendocsprop{pthesisnamei}\\
1601     \@degree\\
1602     \uantwerpendocsprop{pthesisnameii}\\
1603     \medskip
1604     \textbf{\@author}
1605     \vfill
1606     \begin{minipage}[b]{0.4\textwidth}
1607         \@defenselocation, \@defensedate
1608     \end{minipage}
1609     \hfill
1610     \begin{minipage}[b]{0.4\textwidth}
1611         \flushright
1612         \supervisorsname{\\}
1613         \jointsupervisors{\\}{ }
1614     \end{minipage}
1615 \end{center}
1616 \clearpage
1617 \textbf{\uantwerpendocsprop{juryname}}\hfill\par
1618 \textbf{\uantwerpendocsprop{jurychairmanname}}\hfill\break
1619 \@jurychairman{}\ifdefinedvoid{\@jurychairmanaff}{ }{, \@jurychairmanaff}\\
1620 \hfill\break
1621 \textbf{\supervisorsname{}}\hfill\break
1622 \jointsupervisorswithaffiliation{\\}{\\}
1623 \hfill\break
1624 \textbf{\uantwerpendocsprop{jurymembersname}}\hfill\break
1625 \jointjurymembers{\\}
1626 \hfill\break
1627 \vfill
1628 \textbf{Contact}\\
1629 \smallskip
1630 \@author\\
1631 \@affiliation\\
1632 \@address\\
1633 \vfill
1634 \copyright{} \@defensedate{} \@author\\
1635 \uantwerpendocsprop{arr}.

```

```

1636 \vfill
1637 \begin{minipage}[b]{.5\linewidth}
1638   \ifdefempty{\@isbn}{\}{ISBN \@isbn}~\
1639   \ifdefempty{\@depot}{\}{Wettelijk depot \@depot}~\
1640 \end{minipage}
1641 \hfill
1642 \ifdefempty{\@isbn}{\}{
1643   \begin{minipage}[b]{.5\linewidth}
1644     \expandafter\EAN \@isbn
1645   \end{minipage}
1646 }
1647 \setcounter{footnote}{0}%
1648 \global\let\thanks\relax
1649 \global\let\maketitle\relax
1650 \global\let\@thanks\@empty
1651 \global\let\title\relax
1652 \global\let\author\relax
1653 \global\let\date\relax
1654 \global\let\and\relax
1655 \pagestyle{fancy}
1656 \thispagestyle{empty}
1657 \
1658 }
1659 \</pt>

```

`\makefinalpage` Below, one can find the code for the final page of the `phdthesis` class:

```

1660 \< *pt>
1661 \newcommand\makefinalpage{
1662   \cleardoublepage
1663   \thispagestyle{empty}
1664   ~% intentionally blank page
1665   \clearpage
1666   \thispagestyle{empty}
1667   \AddToShipoutPicture*{%
1668     \put(0,0){%
1669       \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1670         \useasboundingbox (0,0) rectangle (\paperwidth,\paperheight);
1671         \fill[sidecolor] (-3mm,-3mm) rectangle (2.125cm,2.625cm);
1672       \end{tikzpicture}
1673     }
1674   }
1675   ~
1676 }
1677 \</pt>

```

6.23 Title page for the report classes

The title page is generated using the `\maketitle` command. As the report class from which we inherit already defines this command, we need to renew it.

`\maketitle` Below, one can find the code for the title page of the `report` class:

```

1678 (*rp)
1679 \renewcommand\maketitle{%
1680   \pagestyle{empty}
1681   \begin{titlepage}
1682     \AddToShipoutPicture*{%
1683       \put(0,0){%
1684         \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1685           \clip (0,0) rectangle(\paperwidth,\paperheight);
1686           \fill[lightgray]
1687             (2.125,20.192) rectangle (\paperwidth,6);
1688           \begin{scope}
1689             \clip (2.125,20.192) rectangle (\paperwidth,6);
1690             \node[anchor=south west]
1691               at (2.125,6)
1692               {\ifx\@titlepageimage\@empty
1693                \else
1694                  \includegraphics[keepaspectratio,
1695                    scale=0.01,
1696                    min size={18.875cm}{14.192cm}]{\@titlepageimage}
1697                \fi};
1698             \end{scope}
1699
1700           \node
1701             [anchor=west,text width=17cm,align=left,font=\Huge,uauaside]
1702             at (2.125,\paperheight-3cm)
1703             {
1704               \textsf{\textbf{\@title}}
1705             };
1706
1707           \node
1708             [anchor=west,text width=17cm,align=left,font=\Large,uauaside]
1709             at (2.125,\paperheight-5cm)
1710             {
1711               \textsf{\textbf{\@subtitle}}
1712             };
1713
1714           \node
1715             [anchor=base west,maincolor,
1716             text width=17cm,align=left,font=\LARGE]
1717             at (2.125,\paperheight-6.5cm)
1718             {\textsf{\textbf{\@author}}};
1719
1720           \fill[maincolor] (2.125,6)
1721             -- (\paperwidth,6)
1722             -- (\paperwidth,2.625)
1723             -- (2.55,2.625)
1724             arc (-90:-180:0.425)
1725             -- cycle;
1726
1727           \node[white,anchor=west,text width=17cm,align=left,font=\small]
1728             at (2.55,5.3)
1729             {\textsf{\textbf{\@extra}}};

```

```

1730
1731      \node[white,anchor=west,text width=17cm,align=left,font=\small]
1732      at (2.55,4)
1733      {\textsf{\textbf{\@affiliation}}
1734       | \@versionyear}\\
1735       \@address}};
1736
1737      \node[anchor=west] at
1738      (2.125,1.313)
1739      {\includegraphics[width=4.75cm]{\logopos}};
1740    \end{tikzpicture}
1741  }
1742 }
1743 \end{titlepage}%
1744 ~\par\relax
1745 \cleardoublepage
1746 \begin{center}
1747   \includegraphics[width=4.75cm]{\logopos}
1748   \vfill
1749   \@affiliation\\
1750   \@extra\par
1751   \vfill
1752   \Huge\textsf{\@title}\par
1753   \large\textsf{\@subtitle}\par
1754   \vfill
1755   \textbf{\@author}
1756   \vfill
1757 \end{center}
1758 \clearpage
1759 \vfill
1760 \textbf{Contact}\\
1761 \smallskip
1762 \@author\\
1763 \@affiliation\\
1764 \@address\\
1765 \vfill
1766 \copyright{} \@versionyear{} \@author\\
1767 \uantwerpendocsprop{arr}.
1768 \vfill
1769 \setcounter{footnote}{0}%
1770 \global\let\thanks\relax
1771 \global\let\maketitle\relax
1772 \global\let\@thanks\@empty
1773 \global\let\title\relax
1774 \global\let\author\relax
1775 \global\let\date\relax
1776 \global\let\and\relax
1777 \pagestyle{fancy}
1778 \thispagestyle{empty}
1779 \
1780 }
1781 </rp>

```

`\makefinalpage` Below, one can find the code for the final page of the `phdthesis` class:

```

1782 <*rp>
1783 \newcommand\makefinalpage{
1784   \cleardoublepage
1785   \thispagestyle{empty}
1786   ~% intentionally blank page
1787   \clearpage
1788   \thispagestyle{empty}
1789   \begin{tikzpicture}[remember picture,overlay]
1790     \node at (current page.center) {
1791       \begin{tikzpicture}[inner sep=0pt]
1792         \clip (0,0) rectangle(\paperwidth,\paperheight);
1793         \fill[sidecolor] (0,0) rectangle (2.125cm,2.625cm);
1794       \end{tikzpicture}
1795     };
1796   \end{tikzpicture}
1797 }
1798 </rp>

```

6.24 Title page for the letter class

6.24.1 Title Page

`\maketitle` The top of the letter is generated using the `\maketitle` command.

```

1799 <*le>
1800 \newcommand\maketitle{%
1801   \pagestyle{fancy}
1802   \thispagestyle{empty}
1803   \begin{tikzpicture}[overlay,remember picture]
1804     \path (current page.north west) +(1.8cm,-1.2cm)
1805     node[anchor=north west] {
1806       \includegraphics[height=1.1cm]{\@logo}
1807     };
1808     \draw (current page.north west)
1809     +(1cm,-98mm) -- +(1.5cm,-98mm);
1810     % 90 x 45
1811     % pos: 20mm van kant, 15mm van onderkant
1812     \path (current page.north east) +(-100mm,-65mm)
1813     node[anchor=west,text width=80mm,align=left] {
1814       \scriptsize\textcolor{gray}{\uline{\@returnaddress}}\\*
1815       \normalsize\@to\\*
1816       \@toorganization\\*
1817       \@toaddress
1818     };
1819   \end{tikzpicture}
1820   ~\\[3ex]
1821   \textcolor{uauaside}{\textbf{\@sender}}
1822   \ifx\@senderrole\@emptymacro\\[1.75ex]\else \\*\@senderrole\\[1.75ex]\fi
1823   \@faculty
1824   \ifx\@unit\@emptymacro\else\\* \@unit\fi~\\[1.75ex]
1825   \@address\\[1.75ex]

```

```

1826 \ifx\@email\@emptymacro\else E \@emailuser\tat{}\@emaildomain\\\fi
1827 \ifx\@phone\@emptymacro\else T \@phone\\\fi
1828 \ifx\@fax\@emptymacro\else F \@fax\\\fi
1829 \ifx\@mobile\@emptymacro\else M \@mobile\\\fi
1830 ~\\\[4ex]
1831 \begin{tikzpicture}[anchor=north west,align=left,outer sep=0,inner sep=0]
1832   \path
1833     (0,0) node { \scriptsize \strut
1834       \textcolor{gray}{\uppercase\expandafter{\uantwerpendocsprop{datename}} } }
1835     (4cm,0) node { \scriptsize \strut
1836       \textcolor{gray}{\uppercase\expandafter{\uantwerpendocsprop{subjectname}} } }
1837     (0,-2.5ex) node { \strut \@date }
1838     (4cm,-2.5ex) node[align=left] { \strut \@subject };
1839 \end{tikzpicture}~\\\[4ex]
1840 }
1841 \le)

```

The trailer of the page is automatically generated at the end of the document:

```

1842 \*le)
1843 \AtEndDocument{
1844   \@closing\*\[3ex]\@signature~\\\[3ex]
1845   \@sender
1846   \ifx\@senderrole\@emptymacro\\\[8ex]\else\*\@senderrole\\\[8ex]\fi
1847   \setlength{\parskip}{0em}
1848   \ifx\@carboncopy\@emptymacro\else CC: \@carboncopy\\\[4ex]\fi
1849   \ifx\@enclosed\@emptymacro\else ENCL: \@enclosed\fi
1850   \label{lastpage}
1851 }
1852 \le)

```

6.25 Title page for the exam class

Now Groep has been replaced by Reeks to be consistent with UAntwerpen PC-room nomenclature

`\maketitle` The title page of the exam class is generated using the `\maketitle` command.

```

1853 \*ex)
1854 \renewcommand\maketitle{%
1855   \pagestyle{fancy}
1856   \AddToShipoutPicture*{%
1857     \put(0,0){%
1858       \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1859         \clip (0,0) rectangle(\paperwidth,\paperheight);
1860         \fill[lightgray]
1861           (2.125,{\paperheight-7cm}) rectangle (\paperwidth,6);
1862
1863         \node
1864           [anchor=west,text width={\paperwidth-5cm},align=left]
1865           at (2.125,{\paperheight-3cm})
1866           {%

```

```

1867         \fontfamily{phv}\fontsize{18}{22}\fontseries{b}%
1868         \fontshape{n}\selectfont%
1869         \@course{}
1870         \ifx\@exampart\@emptymacro
1871         \else --- \@exampart\fi
1872     };
1873     \node
1874     [anchor=west,text width={\paperwidth-5cm},align=left]
1875     at (2.125,{\paperheight-4cm})
1876     {%
1877         \fontfamily{phv}\fontsize{12}{18}\fontseries{b}%
1878         \fontshape{n}\selectfont%
1879         \@coursecode
1880     };
1881
1882     \node
1883     [anchor=west,text width={\paperwidth-5cm},align=left,font=\large]
1884     at (2.125,{\paperheight-5cm})
1885     {%
1886         \fontfamily{phv}\fontsize{12}{18}\fontseries{m}%
1887         \fontshape{n}\selectfont%
1888         \uantwerpendocsprop{seriesname} \@examgroupnumber{} \hfill \@examdate{}
1889     };
1890
1891     \node[anchor=south west,align=left,inner sep=0pt] at (3,21)
1892     {%
1893         \fontfamily{phv}\fontsize{14}{19}\fontseries{b}%
1894         \fontshape{n}\selectfont%
1895         \uantwerpendocsprop{examname}
1896     };
1897
1898     \node[anchor=south west,align=left,inner sep=0pt] at (3,19)
1899     {%
1900         \fontfamily{phv}\fontsize{12}{18}\fontseries{m}%
1901         \fontshape{n}\selectfont%
1902         \uantwerpendocsprop{lastname}
1903     };
1904     \foreach \nn in {0,1,...,33} {
1905         \draw[fill=white] (3,18) ++({0.5*\nn},0) rectangle +(0.5,0.8);
1906     }
1907
1908     \node[anchor=south west,align=left,inner sep=0pt] at (3,17)
1909     {%
1910         \fontfamily{phv}\fontsize{12}{18}\fontseries{m}%
1911         \fontshape{n}\selectfont%
1912         \uantwerpendocsprop{firstname}
1913     };
1914
1915     \foreach \nn in {0,1,...,23} {
1916         \draw[fill=white] (3,16) ++({0.5*\nn},0) rectangle +(0.5,0.8);
1917     }
1918
1919     \node[anchor=south west,align=left,inner sep=0pt] at (16,17)
1920     {%

```

```

1921         \fontfamily{phv}\fontsize{12}{18}\fontseries{m}%
1922         \fontshape{n}\selectfont%
1923         \uantwerpendocsprop{docketname}
1924     };
1925     \foreach \nn in {0,1,...,7} {
1926         \draw[fill=white] (16,16) ++({0.5*\nn},0) rectangle +(0.5,0.8);
1927     }
1928
1929     \node[anchor=south west,align=left,inner sep=0pt,text width=17cm]
1930     at (3,14)
1931     {%
1932         \fontfamily{phv}\fontsize{12}{21}\fontseries{m}%
1933         \fontshape{n}\selectfont%
1934         \uantwerpendocsprop{examdurationname}: \@examlength
1935     };
1936     \node[anchor=south west,align=left,inner sep=0pt,text width=17cm]
1937     at (3,11)
1938     {%
1939         \fontfamily{phv}\fontsize{12}{15}\fontseries{m}%
1940         \fontshape{n}\selectfont%
1941         \begin{tabular}{@{}l@{}}
1942             \uantwerpendocsprop{examstartname}& : & \@tstart\\
1943             \uantwerpendocsprop{examendname} & : & \@tend
1944         \end{tabular}
1945     };
1946
1947     \node[anchor=south west,align=left,inner sep=0pt,text width=17cm]
1948     at (3,8)
1949     {%
1950         \fontfamily{phv}\fontsize{12}{21}\fontseries{m}%
1951         \fontshape{n}\selectfont%
1952         \roomsname: \jointrooms{, }
1953     };
1954
1955     \node
1956     [anchor=base west,uauamain,
1957     text width={\paperwidth-5cm},align=left,font=\LARGE]
1958     at (2.125,{\paperheight-6.5cm})
1959     {\textsf{\textbf{\@author}}};
1960
1961     \fill[gray] (2.125,6)
1962     -- (\paperwidth,6)
1963     -- (\paperwidth,2.625)
1964     -- (2.55,2.625)
1965     arc (-90:-180:0.425)
1966     -- cycle;
1967
1968     \node[white,anchor=west,align=left,font=\large]
1969     (SN) at (2.55,4.9)
1970     {
1971         \begin{tabular}{@{}l@{~\,},p{14.5cm}}
1972             \textsf{\lecturersname}
1973             & \textsf{\textbf{\jointlecturers{ | }}}
1974         \end{tabular}

```



```

1975     };
1976
1977     \node[white,anchor=west,text width=17.5cm,align=left,font=\small]
1978     at (2.55,3.7)
1979     {\textsf{\@degree{}}\}
1980     \textsf{\textbf{\@faculty{}}}};
1981
1982     \node[anchor=west] at (2.125,1.313)
1983     {\includegraphics[width=4.75cm]{\logopos}};
1984     \end{tikzpicture}
1985   }
1986 }
1987 ~\par\relax
1988 \clearpage
1989 \lfoot[\small \@shorttitle]{\small \@shorttitle}
1990 \rfoot[\small Groep \@examgroupnumber{} ---
1991 \@academicyear]{\small Groep \@examgroupnumber{} --- \@academicyear}
1992 \renewcommand*{\footrulewidth}{1pt}
1993 }
1994 \end{document}

```

6.26 Auxiliary functions to typeset exams

\question Add a small box with the weight of the question on the current line (right aligned).

```

1995 \begin{document}
1996 \newcounter{question}
1997 \setcounter{question}{0}
1998 \renewcommand*{\thequestion}{\@arabic{c@question}}
1999 \newcommand{\question}[1]{
2000   \stepcounter{question}
2001   \thequestion.~\#1%
2002 }
2003 \end{document}

```

\questionweight Add a small box with the weight of the question on the current line (right aligned).

```

2004 \begin{document}
2005 \newcommand*{\questionweight}[1]{%
2006   \hspace{\fill}
2007   \begin{tabular}{|c|}
2008     \hline
2009     \small \uantwerpendocsprop{weightname}: \#1\\
2010     \hline
2011   \end{tabular}}
2012 }
2013 \end{document}

```

\engdut typesets the question in two columns, the left column taking the English variant of the question and the right column taking the Dutch variant.

```

2014 \begin{document}

```

```

2015 \newcommand{\engdut}[2]{%
2016   \begin{tabular}{ccc}%
2017     \selectlanguage{english}%
2018     \begin{minipage}[t]{0.45\textwidth}%
2019       #1
2020     \end{minipage}%
2021     &~~~&
2022     \selectlanguage{dutch}%
2023     \begin{minipage}[t]{0.45\textwidth}%
2024       #2
2025     \end{minipage}%
2026   \end{tabular}
2027   \selectlanguage{english}%
2028 }
2029 \end{ex}

```

`\setmcsymbol` sets the symbol to be used as multiple choice mark (by default a square).

```

2030 \end{ex}
2031 \newcommand*\@mcsymbol{\square}
2032 \newcommand*\setmcsymbol[1]{\renewcommand*\@mcsymbol{#1}}
2033 \end{ex}

```

`\mc` typesets a multiple choice answer candidate (monolingual, i.e. in a single column).

```

2034 \end{ex}
2035 \newcommand\mc[1]{%
2036   \hfill\break\quad\begin{tabular}{cc}
2037     $\@mcsymbol$
2038     &
2039     \begin{minipage}[t]{0.9\textwidth}%
2040       #1
2041     \end{minipage}%
2042   \end{tabular}
2043   }
2044 \end{ex}

```

`\engdutm` typesets a multiple choice answer candidate in two columns, the left column taking the English variant of the question and the right column taking the Dutch variant.

```

2045 \end{ex}
2046 \newcommand{\engdutm}[2]{%
2047   \hfill\break\begin{tabular}{cccc}
2048     $\@mcsymbol$
2049     &
2050     \selectlanguage{english}%
2051     \begin{minipage}[t]{0.42\textwidth}%
2052       #1
2053     \end{minipage}%
2054     &---&
2055     \selectlanguage{dutch}%

```

```

2056             \begin{minipage}[t]{0.42\textwidth}%
2057                 #2
2058             \end{minipage}%
2059         \end{tabular}
2060         \selectlanguage{english}%
2061     }
2062 \end{ex}

```

`\insertsolutionspagepartial` fills the remainder of the page with 'fill-out' squares. as observing/controlling the current line position in L^AT_EX is not easy, one has to provide the number of centimeters below the bottom of the page, one wants to start the fill-out squares.

```

2063 \end{ex}
2064 \newcommand\insertsolutionspagepartial[1]{
2065     ~\relax
2066     \AddToShipoutPicture*{%
2067         \put(0,0){%
2068             \begin{tikzpicture}
2069                 \clip (0,0) rectangle (21,#1);
2070 % \draw[densely dotted, step=0.5cm,black!20] (0.999,0.990) grid (20,1.5);
2071 \draw[densely dotted, step=0.5cm,black!20] (0.999,1.499) grid (2,2.5);
2072 \draw[densely dotted, step=0.5cm,black!20] (18.999,1.499) grid (20,2.5);
2073
2074 \draw[densely dotted, step=0.5cm,black!20] (0.999,2.499) grid (20,27);
2075 \draw[densely dotted, step=0.5cm,black!20] (0.999,27) grid (16,28);
2076 \draw[densely dotted, step=0.5cm,black!20] (19.499,27) grid (20,28);
2077 \draw[densely dotted, step=0.5cm,black!20] (0.99,27.999) grid
2078 (20,28.5);
2079 \draw[ultra thick] (1,#1) -- (20,#1);
2080 \end{tikzpicture}
2081 }
2082 }%
2083 \clearpage
2084 \relax
2085 }
2086 \end{ex}

```

`\insertsolutionspage` inserts a full solutions page, i.e. flushes the current page and inserts a full page with 'fill-out' squares. The argument allows for specifying a watermark text (e.g. 'Scrap paper').

```

2087 \end{ex}
2088 \newcommand\insertsolutionspage[1]{
2089     \clearpage
2090     \AddToShipoutPicture*{%
2091         \put(0,0){%
2092             \begin{tikzpicture}
2093                 \clip (0,0) rectangle (21,29.5);
2094                 \draw[densely dotted, step=0.5cm,black!20] (0.999,1.499) grid (2,2.5);
2095                 \draw[densely dotted, step=0.5cm,black!20] (18.999,1.499) grid (20,2.5);
2096
2097                 \draw[densely dotted, step=0.5cm,black!20] (0.999,2.499) grid (20,28);
2098                 \draw[densely dotted, step=0.5cm,black!20] (0.999,28) grid (16,28.5);

```

```

2099      \draw[densely dotted, step=0.5cm,black!20] (19.499,28) grid (20,28.5);
2100      \end{tikzpicture}
2101    }
2102    \put(120,150){\rotatebox{60}{\textcolor{watermark}{
2103      \fontfamily{phv}\fontsize{105}{130}\fontseries{m}\fontshape{n}\selectfont
2104      #1}
2105    }
2106  }
2107 }%
2108 ~\relax
2109 }
2110 </ex>

```

We add a lastpage label to the final page

```

2111 <*ex>
2112 \AtEndDocument{
2113   \label{lastpage}
2114 }
2115 </ex>
2116 % \end{macrocode
2117 %
2118 % \subsection{References}
2119 %   \begin{macrocode}
2120 <*ct | bmt | pt | rp>
2121 \AtBeginDocument{
2122   \@ifpackageloaded{hyperref}{
2123     \hypersetup{
2124       breaklinks=true,
2125       colorlinks=true,
2126       citecolor=black,
2127       filecolor=black,
2128       linkcolor=black,
2129       pageanchor=true,
2130       pdfpagemode=UseOutlines,
2131       urlcolor=black,
2132       pdftitle={\@title},
2133       pdfsubject={\@subtitle},
2134       pdfauthor={\@author}
2135     }
2136   }{}
2137 }
2138 </ct | bmt | pt | rp>

```

7 The beamer theme

7.1 User guide

```

<*bmrug>
\documentclass[aspectratio=1610]{beamer}
\usetheme[ti]{uantwerpen}
\usepackage[english]{babel}

```

```

The packages below are for demonstration purpose only.
They are not required for the template to work
\usepackage{metalogo}
\usepackage{kantlipsum}
\usepackage{pgfplots}
\usepackage{booktabs}

some stuff to typeset code
\newcommand*\command[1]{\tt \textbackslash #1}}
\NewEnviron{codesnippet}[1][0.8\textwidth]{
  \scriptsize
  \quad\framebox[#1][l]{\texttt{
    \setlength\textwidth{#1}
    \begin{minipage}{0.9\textwidth}
      \BODY
    \end{minipage}
  }}
}
}
\newcommand*\ind[1][2ex]{\hspace*{#1}}
\newcommand*\bframe[1][]{\command{begin}\{#1frame\}}
\newcommand*\eframe[1][]{\command{end}\{#1frame\}}

\title{This is your \texttt{\textbackslash}title{}}
\subtitle[my short title]{This is your \texttt{\textbackslash}subtitle{}}
\date[my short date]{This is your \texttt{\textbackslash}date{}}
\author[my short author]{This is your \texttt{\textbackslash}author{}}

\begin{document}

\begin{frame}[negativefill]
  \maketitle
\end{frame}

\begin{frame}
  \maketitle
\end{frame}

\begin{frame}[negative]
  \maketitle
\end{frame}

\begin{frame}
  {What's on the menu?}
  {Bon app\`etit!}
  ~\\
  \tableofcontents
\end{frame}

\section{Loading the theme and theme options}

\begin{frame}[negative]
  \sectionpage

```

```

\end{frame}

\begin{frame}
  {Using our beamer theme}

  The \texttt{uantwerpen} beamer theme is distributed by CTAN. It
  should be installed with your \TeX{} distribution by default.

  You can load the package in your preamble as:

  \begin{codesnippet}
    \command{documentclass}[aspectratio=1610]\{beamer\}\}
    \command{usetheme}[theme-options-go-here]\{uantwerpen\}\}
    \command{usepackage}[english]\{babel\}
  \end{codesnippet}

  \heading{Remarks}
  \begin{itemize}
    \item The theme behaves well for all supported beamer aspect
      ratios.
    \item $16\times 10$ is currently your best option to maximize your
      slide size given a modern LCD-projector!
    \item Only \texttt{dutch} and \texttt{english} are supported.
      The correct logoware is selected using the babel language option!
  \end{itemize}
\end{frame}

\begin{[13qframe]}[t,rqgraphic={
  \begin{minipage}{0.35\textwidth}
    \footnotesize
    \begin{center}
      \begin{tabular}{c}
        \toprule
        \bfseries option\\
        \midrule
        \tt be \\
        \tt fbd \\
        \tt ggw \\
        \tt lw \\
        \tt ow \\
        \tt re \\
        \tt sw \\
        \tt ti \\
        \tt we \\
        \tt iob \\
        \bottomrule
      \end{tabular}
    \end{center}
  \end{minipage}
}]
{Theme options}{
  The following theme options may come in handy:
  \begin{description}
    \item[\tt X] to invoke your own faculty's colors and logos,

```

```

        with X one of the options in the table on the right\\
        (I assume you know your faculty abbreviation)
\item[\tt nofonts] disables font loading, so you can load your own fonts
\item[\tt rgb] to select RGB color encoding (best for projecting, default)
\item[\tt cmyk] to select CMYK color encoding (best for printing)
\item[\tt neutralcolors] to disable your faculty colors and use the
        standard UAntwerpen colors
\end{description}
\medskip

The defaults of the theme are:
\begin{itemize}
\item no faculty option ($\rightarrow$ standard UAntwerpen logos)
\item \texttt{rgb}
\end{itemize}

\end{l3qframe}

\begin{frame}[t]
{A note on the compiler you are using}
{Fonts galore}

Depending on the type of compiler you use, a different font scheme
is loaded:
\begin{description}
\item[\LaTeX] --- ancient compiler - no support\\
        Don't use!
\item[pd\LaTeX] --- very old school compiler - no OTF/TTF support\\
        Computer Modern Sans Serif is used as font
\item[\XeLaTeX] --- old school compiler - the first to have OTF/TTF
        support\\
        Calibri is used as font (with cmbright math fonts)
\item[\LuaLaTeX] --- current compiler - your best option\\
        Calibri is used as font (with cmbright math fonts)
\end{description}

\end{frame}

\section{Title slides}

\begin{frame}[negative]
\sectionpage
\end{frame}

\begin{frame}[t]
{Title slides}
\heading{Contents} ---
The contents of the title slide can be set in your preamble
using the classical \LaTeX{} commands:
\begin{itemize}
\item \command{title}\{\}\}
\item \command{subtitle}\{\}\}
\item \command{author}\{\}\}
\item \command{date}\{\}\}

```

```

\end{itemize}
We don't specify an institute, as the logos do so.

\heading{Code} --- The titleslide is easily typeset as:\\
\begin{codesnippet}
  \bframe[] [option]\\
  \ind\command{maketitle}\\
  \eframe
\end{codesnippet}

  with no option, or one of: \texttt{normal}, \texttt{negative},
  \texttt{negativefill}.
\end{frame}

\section{Regular slides}

\subsection{Bare}

\begin{frame}[negative]
  \sectionpage
\end{frame}

\begin{frame}[negative]
  \subsectionpage
\end{frame}

\begin{frame}[t]
  {Frame titles}
  {And subtitles}
  \heading{How to specify them!}\\
  Titles are specified using \command{frametitle}\{\}\} or
  \command{framesubtitle}\{\}\} or even easier as first and second argument
  to the \texttt{frame} environment (or their derived versions).

  \begin{codesnippet}
    \bframe[] [options go here, comma separated]\\
    \ind\{first argument\}\\
    \ind\{second argument\}\\
    \ind frame contents \\
    \eframe
  \end{codesnippet}
  \bigskip

  \heading{Don't need them?}\\
  If you need a slide without titles: just don't specify them!

  \heading{Want to get rid of the footer as well?}\\
  Specify the \texttt{plain} option to the frame.

\end{frame}

\begin{frame}[t]
  {The canvas}

```



```

\heading{Flavors} --- The canvas of the slide has four flavors:
\begin{description}
\item[normal]
    the ordinary white background slide
\item[negativefill]
    a reverse video slide on a background (in maincolor) without white
    margins
\item[negative]
    a reverse video slide on a background (in maincolor) with white
    margins
\item[graphicfill]
    a graphic canvas without white margins (graphic can be photo,
    graph, \ldots)
\item[graphic] a graphic canvas with white margins (graphic can be
    anything)
\end{description}
They are specified as options to the frame environment (or its
derivatives).

\heading{Remarks}
\begin{itemize}
\item You don't need to specify the normal canvas, it is the
    default.
\item In handout mode the negative and negativefill canvas will be
    typeset as normal canvas (to allow for easy printing).
\item The graphic option has many variants that we will discuss later.
\end{itemize}
\end{frame}

\begin{frame}[negativefill]
    {A negativefill slide}
    {with a subtle subtitle}
    \kant[1]
\end{frame}

\begin{frame}[negative,t]
    {A negative slide}
    {with a subtle subtitle}
    Don't do this! Don't use a title and subtitle, nor straight text
    but put material on this slide that does not touch or cross the
    edges of the background!\\
    E.g., the graph on the bottom right
    \place[anchor=south east] at (0.9,0.1) {
        \begin{tikzpicture}[white]
            \begin{axis}
                [width=4cm,height=5cm,grid=both,font=\footnotesize]
                \addplot[white] {x^2};
            \end{axis}
        \end{tikzpicture}
    }
    The best advice is not to reserve this canvas for title frames and
    intermission slides.
\end{frame}

```

```

\begin{frame}[t]
  {Vertical alignment}

  You can easily specify the vertical alignment of your frame
  contents, using the options
  \begin{description}
    \item[\texttt{t}] for top
    \item[\texttt{c}] for center
    \item[\texttt{b}] for bottom
  \end{description}

  Example:\\[1ex]
  \begin{codesnippet}
    \bframe[] [t]\\
    \ind\{Title\}\\
    \ind\{Subtitle\}\\
    \ind frame contents\\
    \eframe
  \end{codesnippet}

\end{frame}

\begin{frame}[t]
  {Colors}
  {What a wonderful world}

  \heading{Standard colors}\\
  You can select the theme colors using:\\
  \textcolor{maincolor}{Main color}:
  can be specified as \LaTeX-color \emph{maincolor}\\
  \textcolor{sidecolor}{Side color}:
  can be specified as \LaTeX-color \emph{sidecolor}\\
  \textcolor{basecolor}{Base color}:
  can be specified as \LaTeX-color
  \emph{basecolor}

  \heading{Advice}\\
  \begin{itemize}
    \item Stick to the standard colors or use grayscale tints!
    \item Only use color when functional (e.g. in graphs)
  \end{itemize}

  \heading{Alert}
  You can use \alert{\command{alert{}}}} to grab the attention of the
  user. It will typeset your content in \alert{red}.

  \heading{Not taking any advice?}\\
  You can fiddle with the colors, but do so in smart way.
  Use \command{setbeamercolor}. You can see how it is used in the
  \texttt{beamercolorthemeuantwerpen.sty} file.
\end{frame}

\begin{frame}[t]
  {Logo demo}

```

```

The logo's can be used as follows (but you should not need them):
\begin{itemize}
\item \command{includegraphics[width=3cm]{\command{logopos}}}\
\begin{center}
\begin{tikzpicture}
\draw[fill,white] (0,0) rectangle node
{\includegraphics[width=3cm]{\logopos}} (4,1.25);
\end{tikzpicture}
\end{center}
\item \command{includegraphics[width=3cm]{\command{logoneg}}}\
\begin{center}
\begin{tikzpicture}
\draw[fill] (0,0) rectangle node
{\includegraphics[width=3cm]{\logoneg}} (4,1.25);
\end{tikzpicture}
\end{center}
\item \command{includegraphics[width=3cm]{\command{logomonowhite}}}\
\begin{center}
\begin{tikzpicture}
\draw[fill] (0,0) rectangle node
{\includegraphics[width=3cm]{\logomonowhite}} (4,1.25);
\end{tikzpicture}
\end{center}
\end{itemize}
\end{frame}

\subsection{With graphic eye candy}

\begin{frame}[negative]
\subsectionpage
\end{frame}

\begin{frame}[t]
{Basic idea}

\heading{The idea} --- put support material (photo or graph) on the
slide next to the frame content.
This is done by
\begin{itemize}
\item specifying an appropriate canvas
\item using an appropriate frame derivative
\end{itemize}

\heading{Good combinations}
\begin{center}\small
\begin{tabular}{ccc}
\toprule
\bfseries frame option & \bfseries graphic on frame
& \bfseries corresponding frame derivative\\
\midrule
lqgraphic & left quarter & r3qframe \\
rqgraphic & right quarter & l3qframe \\
lhgraphic & left half & rhframe
\end{tabular}
\end{center}

```

```

        rhgraphic & right half      & lhframe \\
        thgraphic & top half        & bhframe \\
        bhgraphic & bottom half    & thframe\\
        \bottomrule
    \end{tabular}
\end{center}

\end{frame}

\begin{l3qframe}[rqgraphic]
{Some Random Title}
{Please, adapt!}

\small
The slide has been typeset as:\\
\begin{codesnippet}[\textwidth]
    \bframe[l3q][rqgraphic=\{<load photo here>\}]\}
    \ind\{Title\}\}
    \ind\{Subtitle\}\}
    \ind frame contents\\
    \eframe[l3q]
\end{codesnippet}
\smallskip

\subheading{Remarks}
\begin{itemize}
\item Load photo as:\\
    \command{includegraphics}[width=0.25\command{paperwidth}, min height=\command{textheight}]
    \{image.jpg\}
\item If \texttt{rqgraphic} is specified without argument, a standard photo
    is loaded.
\item Note: you can avoid rounding the corner using the
    frame option \texttt{noround} (may be useful when not using a photo)
\end{itemize}
\end{l3qframe}

\begin{r3qframe}[lqgraphic,t]
{Some Random Title}
{Please, adapt!}

\small
The slide has been typeset as:\\
\begin{codesnippet}[\textwidth]
    \bframe[r3q][lqgraphic=\{<load photo here>\}]\}
    \ind\{Title\}\}
    \ind\{Subtitle\}\}
    \ind frame contents\\
    \eframe[r3q]
\end{codesnippet}
\smallskip

\subheading{Remarks}
\begin{itemize}
\item Load photo as:\\

```

```

\command{includegraphics[width=0.25\command{paperwidth}, min height=\command{textheight}]
  \{image.jpg\}}
\item If \texttt{rqgraphic} is specified without argument, a standard photo
  is loaded.
\item Note: you can avoid rounding the corner using the
  frame option \texttt{noround} (may be useful when not using a photo)
\end{itemize}
\end{r3qframe}

\begin{lhframe}[rhgraphic]
  {Some Random Title}

  \small
  The slide has been typeset as:\\
  \begin{codesnippet}[\textwidth]
    \bframe[lh][rhgraphic=\{<load photo here>\}]\}
    \ind\{Title\}\}
    \ind\{Subtitle\}\}
    \ind frame contents\\
    \eframe[lh]
  \end{codesnippet}
  \smallskip

  \subheading{Remarks}
  \begin{itemize}
    \item Load photo as:\\
      \command{includegraphics[min
        width=0.5\command{paperwidth}, min height=\command{textheight}]
        \{image.jpg\}}
    \item If \texttt{rqgraphic} is specified without argument, a standard photo
      is loaded.
    \item Note: avoid rounding the corner using \texttt{noround}
  \end{itemize}
\end{lhframe}

\begin{rhframe}[lhgraphic,t]
  {Some Random Title}

  \small
  The slide has been typeset as:\\
  \begin{codesnippet}[\textwidth]
    \bframe[rh][lhgraphic=\{<load photo here>\}]\}
    \ind\{Title\}\}
    \ind\{Subtitle\}\}
    \ind frame contents\\
    \eframe[rh]
  \end{codesnippet}
  \smallskip

  \subheading{Remarks}
  \begin{itemize}
    \item Load photo as:\\
      \command{includegraphics[min
        width=0.5\command{paperwidth}, min height=\command{textheight}]

```

```

        \{image.jpg\}}
\item If \texttt{rqgraphic} is specified without argument, a standard photo
    is loaded.
\item Note: avoid rounding the corner using \texttt{noround}
\end{itemize}
\end{rhframe}

\begin{bhframe}[thgraphic,t]
    {Some Random Title}{Please, adapt!}
    \small
    The slide has been typeset as:
    \begin{codesnippet}[\textwidth]
        \bframe[bh][thgraphic=\{<load photo here>\}]\}
        \ind\{Title\}\}
        \ind\{Subtitle\}\}
        \ind frame contents\}
        \eframe[bh]
    \end{codesnippet}
\end{bhframe}

\begin{thframe}[bhgraphic,t]
    {Some Random Title}
    {Please, adapt!}
    \small
    The slide has been typeset as:
    \begin{codesnippet}[\textwidth]
        \bframe[th][bhgraphic=\{<load photo here>\}]\}
        \ind\{Title\}\}
        \ind\{Subtitle\}\}
        \ind frame contents\}
        \eframe[th]
    \end{codesnippet}
\end{thframe}

\section{Intermission slides}

\begin{frame}[negative]
    \sectionpage
\end{frame}

\subsection{Standard section slides}

\begin{frame}[negative]
    \subsectionpage
\end{frame}

\begin{frame}[t]
    {Basic idea}

    You can select any of the canvas templates: negative, negativefill,
    graphic, graphicfill and normal, and combine it with:
    \begin{description}
        \item[\command{sectionpage}]
        \item[\command{subsectionpage}]
    \end{description}

```

```

\end{description}

Example:\\[1ex]
\begin{codesnippet}[0.8\textwidth]
  \bframe[] [negative]\\
  \ind \command{sectionpage}\\
  \eframe\\-\\
  \bframe[] [negative]\\
  \ind \command{subsectionpage}\\
  \eframe
\end{codesnippet}\\[1ex]
(this how the previous two slide were generated)
\end{frame}

\subsection{Custom intermission slides}

\begin{frame}[negative]
  \subsectionpage
\end{frame}

\begin{frame}[t]
  {Basic idea}

  If you are a fan of graphic material in slideware, you can use a
  \texttt{graphic} or \texttt{graphicfill} canvas in combination with
  small snippets you put on the slide using\\[1ex]
  \quad\command{place}[node options] at (x,y) \{\<material>\}\\[1ex]
  with
  \begin{itemize}
    \item  $(x,y)=(0,0)$  the bottom left of the slide and  $(1,1)$  the top
      right of the slide
    \item \texttt{node options} any options you want to hand over to the
      tikz node that is used to position the material.
  \end{itemize}
  \medskip

  E.g., the next slide was created using:\\[1ex]
  \begin{codesnippet}[0.8\textwidth]
    \bframe[] [graphic,t]\\
    \ind\command{place} at (0.5,0.5) \{\command{uantwerpenicon}[scale=0.8]\}\\
    \eframe
  \end{codesnippet}
  \medskip

  You will have to run \LaTeX{} twice in order for the position to be correct!
\end{frame}

\begin{frame}[graphic,t]
  \place at (0.5,0.5) {\command{uantwerpenicon}[scale=0.8]}
\end{frame}

\begin{frame}[t]
  {Shading photographs}

```

Often you need make a photograph a little bit more opaque in order for the (white) text to readable.

To this end you can use the following command $\backslash[1ex]$
 $\backslash\quad\backslash\command{darken[s]\{<material>\}\}\backslash[1ex]$
 with $\$s$ a value between 0 and 1 to specify the level of darkening.

E.g., the next slide was created using:

```
\begin{codesnippet}[0.9\textwidth]
  \bframe[] [graphicfill=\{ \command{darken}%
    [0.25]\{ \command{includegraphics}%
      [scale=0.1,min width=\command{paperwidth},min height=\command{paperheight}]\%
      \{Images/uantwerpen-09.jpg\}\},t]\{ \{
    \command{place} [anchor=north east] at (0.95,0.5) \{ \{
    \ind\command{uantwerpencallout}\{3\}\{2.5\}\{ \{
    \ind\ind\command{bfseries} You cannot be serious!\textbackslash\textbackslash[1ex]\{
    \ind\ind John McEnroe\}\}
    \}\}
  \eframe
\end{codesnippet}
\end{frame}

\begin{frame}[graphicfill={\darken[0.25]%
  {\includegraphics[scale=0.1,min width=\paperwidth,min height=\paperheight]%
    {Images/uantwerpen-09.jpg}}},t]
  \place [anchor=north east] at (0.95,0.5) {
    \uantwerpencallout{3}{2.5}{
      \bfseries You cannot be serious!\[1ex]
      John McEnroe}
    }
\end{frame}

\begin{frame}[t]
  {Shading photographs locally}
```

You can also choose to shade the local backdrop of the material you put on the side. If you like the $\backslash\command{uantwerpencallout}$ command of the previous slide, you can give it an optional argument to set the fill opacity of the backdrop behind the text.

E.g., the next slide was created using:

```
\begin{codesnippet}[0.9\textwidth]
  \bframe[] [graphic,t]\{ \{
  \ind\command{place} [anchor=north west] at (0.1,0.9) \{ \{
  \ind\ind\command{uantwerpencallout}[fill opacity=0.5]\{4.5\}\{2.5\}\{ \{
  \ind\ind\ind\command{bfseries} I'll be back!\textbackslash\textbackslash[1ex]\{
  \ind\ind\ind Arnold Schwarzenegger\}\}
  \}
  \eframe
\end{codesnippet}
\medskip
```

The $\backslash\command{uantwerpencallout}$ command has the following syntax: $\backslash[1ex]$
 $\backslash\quad\backslash\command{uantwerpencallout}[options]\{width\}\{height\}\{contents\}$


```

\medskip

Remember to run \LaTeX{} twice in order for the position of the
callout to be correct!
\end{frame}

\begin{frame}[graphic,t]
  \place [anchor=north west] at (0.1,0.9) {
    \uantwerpencallout[fill opacity=0.5]{4.5}{2.5}{
      \bfseries I'll be back!\[1ex]
      Arnold Schwarzenegger}
    }
\end{frame}

\section{Demo of some inner theme parts}

\begin{frame}[negative]
  \sectionpage
\end{frame}

\begin{frame}[t]
  {Headings}
  {on two levels}
  You can set headings on two levels, by using
  \begin{itemize}
    \item\command{heading}\{\}
    \item\command{subheading}\{\}
  \end{itemize}
  \heading{Main subject}~\\
  blabla
  \subheading{Subtopic 1}~\\
  blabla
  \subheading{Subtopic 2}~\\
  blabla
  \heading{Next main subject}~\\
  blabla
\end{frame}

\newcommand\listdemo[1][itemize]{
  \begin{#1}
    \item First level
    \begin{#1}
      \item Second level
      \begin{#1}
        \item Third level
      \end{#1}
    \end{#1}
  \end{#1}
}

\begin{frame}[t]
  {Itemize / enumerations}
  {Different styles}

```

```

Usage:\\
Set them (in your preamble) using: \command{setbeamertemplate\{itemize items\}[triangle]}\\
The default of the uantwerpen beamer template is set to \texttt{square} to be
similar to our logo.
\medskip

\begin{columns}
  \column[T]{0.3\textwidth}
  \alert{default}
  \setbeamertemplate{itemize items}[default]
  \listdemo
  \column[T]{0.3\textwidth}
  \alert{triangle}
  \setbeamertemplate{itemize items}[triangle]
  \listdemo
  \column[T]{0.3\textwidth}
  \alert{circle}
  \setbeamertemplate{itemize items}[circle]
  \listdemo
\end{columns}~\\
\bigskip

\begin{columns}
  \column[T]{0.3\textwidth}
  \alert{ball}
  \setbeamertemplate{itemize items}[ball]
  \listdemo
  \column[T]{0.3\textwidth}
  \alert{square}
  \setbeamertemplate{itemize items}[square]
  \listdemo
  \column[T]{0.3\textwidth}
  \alert{enumeration}
  \setbeamertemplate{itemize items}[circle]
  \listdemo[enumerate]
\end{columns}
\end{frame}

\begin{frame}[t]
  {Block material}
  {Nothing special}

  \vfill
  \begin{block}{This is a block}
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi ac
    arcu est, vel posuere velit. In congue erat vel lorem ornare pretium.
  \end{block}
  \vfill
  \begin{exampleblock}{This is an example block}
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi ac
    arcu est, vel posuere velit. In congue erat vel lorem ornare pretium.
  \end{exampleblock}
  \vfill
  \begin{alertblock}{This is an alert block}

```

```

        Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi ac
        arcu est, vel posuere velit. In congue erat vel lorem ornare pretium.
    \end{alertblock}
    \vfill
\end{frame}
\section{Advanced material}

\begin{frame}[negative]
    \sectionpage
\end{frame}

\begin{frame}[t]
    {Customizing the template}

    If you want to override logos/colors to create a template for your
    own research group or department:
    renew the commands below. The redefinitions must be put just after
    the \command{begin\{document\}} statement.\\
    The construction below allows you to put the stuff in a style file
    that you must load after (!) the \command{usetheme} command.\\[1ex]
    \begin{codesnippet}[0.95\textwidth]
        \command{AtBeginDocument\{}\}
        \ind\command{renewcommand*}\command{logopos}\{your-pos-logo-filename-here\}\}
        \ind\command{renewcommand*}\command{logoneg}\{your-negative-logo-filename-
here\}\}
        \ind\command{renewcommand*}\command{logomonowhite}\{your-mono-logo-filename-
here\}\}
        \ind\command{renewcommand*}\command{iconfile}\{your-icon-filename-here\}\}
        \ind\command{colorlet}\{maincolor\}\{your-favorite-color\}\}
        \ind\command{colorlet}\{sidecolor\}\{your-secondfavorite-color\}\}
        \ind\command{colorlet}\{basecolor\}\{some-solid-color\}\}
    \}
    \end{codesnippet}~\\[1ex]
\end{frame}

\begin{frame}
    {Some genuine advice}
    \small

    Dear user,

    Candy slides are nice for PR, but bad for conveying a message.

    Beamer is a tool to typeset technical presentations. Need more
    animation and eye candy? Use other tools. They are much easier in
    ruining your audiences' day.

    Effective slides are simple slides.\\
    Go by cognitive consonance, flirt with cognitive dissonance, but
    stay away from cognitive cacophony.
    This presentation is i.m.ho. a bad one, as it shows the
    cacophony of possibilities. But hey, you were the one asking for it.

    A lot of effort has gone into this template. I hope you like it.

```

If you have good suggestions, e-mail me. If you have questions, I might even help you.

Cheers!

Walter Daems\\
(March 2021)

\end{frame}

\end{document}
</bmrug>

7.2 Implementation

7.2.1 Main beamer theme

```
2139 <*bmr>
2140 %      Copyright 2021 by Walter Daems <walter.daems@uantwerpen.be>
2141 %
2142 %      This file may be distributed and/or modified
2143 %
2144 %      1. under the LaTeX Project Public License and/or
2145 %      2. under the GNU Public License.
2146 %
2147 %      See the file doc/licenses/LICENSE for more details.
2148
2149 \newif\if@nofonts
2150 \@nofontsfalse
2151 \DeclareOption{nofonts}{\@nofontstrue}
2152
2153 \input{uantwerpencommonoptions.clo}
2154
2155 \ProcessOptions
2156
2157 \RequirePackage{uantwerpencolorlogoscheme}
2158
2159 \AtBeginDocument{
2160   \def\appropriatelogo{\logopos}
2161   \def\appropriateslidenumber{%
2162     \usebeamercolor{pageno in head/foot}%
2163     \insertframenumber/\inserttotalframenumber}%
2164 }
2165
2166 \mode<presentation>
2167
2168 \RequirePackage{tikz}
2169 \RequirePackage{graphicx}
2170 \RequirePackage[export]{adjustbox}
2171 \RequirePackage{environ}
2172
2173 \setbeamersize{
```

```

2174 text margin left=.8cm,
2175 text margin right=.8cm
2176 }
2177
2178 \usecolortheme{uantwerpen}
2179 \usefonttheme{uantwerpen}
2180 \useinnertheme{uantwerpen}
2181 \useoutertheme{uantwerpen}
2182
2183 \setbeamertemplate{navigation symbols}{}
2184 \setbeamertemplate{blocks}[rounded][shadow=true]
2185
2186 \mode
2187 <all>
2188 </bmr>

```

7.2.2 Beamer color theme

```

2189 (*bmrcolor)
2190 % Copyright 2021 by Walter Daems <walter.daems@uantwerpen.be>
2191 %
2192 % This file may be distributed and/or modified
2193 %
2194 % 1. under the LaTeX Project Public License and/or
2195 % 2. under the GNU Public License.
2196 %
2197 % See the file doc/licenses/LICENSE for more details.
2198
2199 \mode<presentation>
2200
2201 \RequirePackage{uantwerpencolorlogoscheme}
2202
2203 %% define main color
2204 \setbeamercolor{palette primary}{fg=maincolor}
2205 \setbeamercolor{palette secondary}{fg=sidecolor}
2206 \setbeamercolor{palette tertiary}{fg=uauaside}
2207 \setbeamercolor{palette quaternary}{fg=uauamain}
2208
2209 \setbeamercolor{normal text}{fg=basecolor}
2210 \setbeamercolor{inverse normal text}{fg=white!95!maincolor}
2211 \setbeamercolor{alerted text}{fg=uauamain}
2212 \setbeamercolor{example text}{}
2213
2214 \setbeamercolor{heading}{fg=basecolor}
2215 \setbeamercolor{subheading}{fg=basecolor}
2216 \setbeamercolor{inverse heading}{fg=white}
2217 \setbeamercolor{inverse subheading}{fg=white!75!maincolor}
2218
2219 \setbeamercolor{block body}{bg=black!4}
2220 \setbeamercolor{block title}{bg=black!8,fg=maincolor}
2221 \setbeamercolor{block body example}{bg=black!4}
2222 \setbeamercolor{block title example}{bg=black!8}
2223 \setbeamercolor{block body alerted}{bg=black!4}
2224 \setbeamercolor{block title alerted}{bg=black!8}

```

```

2225
2226 \setbeamercolor{itemize item}{parent=normal text}
2227 \setbeamercolor{enumerate item}{parent=normal text}
2228 \setbeamercolor{itemize subitem}{parent=normal text}
2229 \setbeamercolor{enumerate subitem}{parent=normal text}
2230 \setbeamercolor{itemize subsubitem}{parent=normal text}
2231 \setbeamercolor{enumerate subsubitem}{parent=normal text}
2232
2233 \setbeamercolor{frametitle}{fg=maincolor}
2234 \setbeamercolor{framesubtitle}{fg=sidecolor}
2235 \setbeamercolor{inverse frametitle}{fg=white}
2236 \setbeamercolor{inverse framesubtitle}{fg=white!80!maincolor}
2237
2238 \setbeamercolor{title in title page}{fg=maincolor}
2239 \setbeamercolor{subtitle in title page}{fg=sidecolor}
2240 \setbeamercolor{author in title page}{fg=maincolor}
2241 \setbeamercolor{date in title page}{fg=sidecolor}
2242 \setbeamercolor{inverse title in title page}{fg=white}
2243 \setbeamercolor{inverse subtitle in title page}{fg=white!75!maincolor}
2244 \setbeamercolor{inverse author in title page}{fg=white}
2245 \setbeamercolor{inverse date in title page}{fg=white!75!maincolor}
2246
2247 \setbeamercolor{pageno in head/foot}{fg=basecolor}
2248 \setbeamercolor{inverse pageno in head/foot}{fg=white}
2249
2250 \setbeamercolor{section in toc}{fg=basecolor}
2251 \setbeamercolor{subsection in toc}{fg=basecolor}
2252 \setbeamercolor{section number projected}{fg=white,bg=basecolor}
2253 \setbeamercolor{subsection number projected}{fg=white,bg=basecolor}
2254
2255 \setbeamercolor{section title}{fg=maincolor}
2256 \setbeamercolor{section name}{fg=maincolor}
2257 \setbeamercolor{inverse section title}{fg=white}
2258 \setbeamercolor{inverse section name}{fg=white}
2259
2260 \setbeamercolor{subsection title}{fg=sidecolor}
2261 \setbeamercolor{subsection name}{fg=sidecolor}
2262 \setbeamercolor{inverse subsection title}{fg=white!75!maincolor}
2263 \setbeamercolor{inverse subsection name}{fg=white!75!maincolor}
2264 \mode
2265 <all>
2266 \bmrcolor

```

7.2.3 Beamer font theme

```

2267 (*bmrfont)
2268 %      Copyright 2021 by Walter Daems
2269 %
2270 %      This file may be distributed and/or modified
2271 %
2272 %      1. under the LaTeX Project Public License and/or
2273 %      2. under the GNU Public License.
2274 %
2275 %      See the file doc/licenses/LICENSE for more details.

```

```

2276
2277 \usetikzlibrary{calc}
2278
2279 \if@nofonts
2280 \else
2281 \RequirePackage{iftex}
2282 % Uncomment the following line if in MiKTeX you get the error
2283 % message that \ifluatex is already defined.
2284 % You first option is to update all your packages both in user as in
2285 % admin mode to fix your setup.
2286 % Your second option is to avoid the warning uncommenting the
2287 % following line:
2288 % \let\ifluatex\relax
2289 \iftutex
2290     \usepackage{cmbright}
2291     \usefonttheme{serif}
2292     \usepackage{fontspec}
2293     \setmainfont{Calibri}
2294     \usepackage{sansmathaccent}
2295 \fi
2296 \fi
2297 \usepackage{bm}
2298
2299 \mode<presentation>
2300
2301 \setbeamerfont{normal text}{} % ignored currently
2302 \setbeamerfont{alerted text}{}
2303 \setbeamerfont{example text}{}
2304
2305 \setbeamerfont{structure}{}
2306 \setbeamerfont{tiny structure}{size=\tiny}
2307
2308 \setbeamerfont{title}{size=\large,parent=structure}
2309 \setbeamerfont{title in head/footer}{}
2310 \setbeamerfont{title in sidebar}{size=\tiny}
2311
2312 \setbeamerfont{pageno in head/footer}{size=\tiny}
2313
2314 \setbeamerfont{subtitle}{size=\small,parent=title}
2315
2316 \setbeamerfont{author}{}
2317 \setbeamerfont{author in head/footer}{}
2318 \setbeamerfont{author in sidebar}{size=\tiny}
2319
2320 \setbeamerfont{date}{}
2321 \setbeamerfont{date in head/footer}{}
2322 \setbeamerfont{date in sidebar}{}
2323
2324 \setbeamerfont{part name}{size=\LARGE}
2325 \setbeamerfont{part title}{size=\LARGE,parent=title}
2326
2327 \setbeamerfont{section name}{size=\Large}
2328 \setbeamerfont{section title}{size=\Large,parent=title}
2329

```

```

2330 \setbeamerfont{section in toc}{parent=structure}
2331 \setbeamerfont{section in toc shaded}{parent=section in toc}
2332 \setbeamerfont{section in head/footer}{}
2333 \setbeamerfont{section in sidebar}{size=\tiny}
2334 \setbeamerfont{section number projected}
2335   {size=\small,parent={section in toc,projected text}}
2336
2337 \setbeamerfont{subsection name}{size=\large}
2338 \setbeamerfont{subsection title}{size=\large,parent=title}
2339
2340 \setbeamerfont{subsection in toc}{}
2341 \setbeamerfont{subsection in toc shaded}{parent=subsection in toc}
2342 \setbeamerfont{subsection in head/footer}{}
2343 \setbeamerfont{subsection in sidebar}{}
2344
2345 \setbeamerfont{subsubsection in toc}{size=\footnotesize}
2346 \setbeamerfont{subsubsection in toc shaded}{parent=subsubsection in toc}
2347 \setbeamerfont{subsubsection in head/footer}{}
2348 \setbeamerfont{subsubsection in sidebar}{}
2349
2350 \setbeamerfont{headline}{parent={tiny structure}}
2351 \setbeamerfont{footline}{parent={tiny structure}}
2352
2353 \setbeamerfont{frametitle}
2354   {parent=structure,size=\renewcommand*{\baselinestretch}{0.85}\LARGE\bfseries}
2355 \setbeamerfont{framesubtitle}{parent=frametitle,size=\normalsize\bfseries}
2356
2357 \setbeamerfont{caption}{size=\small}
2358 \setbeamerfont{caption name}{parent={structure,caption}}
2359
2360 \setbeamerfont{button}{size=\tiny}
2361
2362 \setbeamerfont{block body}{size=\scriptsize}
2363 \setbeamerfont{block body alerted}{parent={block body}}
2364 \setbeamerfont{block body example}{parent={block body}}
2365 \setbeamerfont{block title}{size=\small,series=\bfseries,parent={structure,block body}}
2366 \setbeamerfont{block title alerted}{parent={block title,alerted text}}
2367 \setbeamerfont{block title example}{parent={block title,example text}}
2368
2369 \setbeamerfont{item}{parent=structure}
2370 \setbeamerfont{subitem}{parent=item}
2371 \setbeamerfont{subsubitem}{parent=subitem}
2372
2373 \setbeamerfont{item projected}{size=\tiny,parent={item,projected text}}
2374 \setbeamerfont{subitem projected}{parent=item projected}
2375 \setbeamerfont{subsubitem projected}{parent=subitem projected}
2376
2377 \setbeamerfont{itemize item}{parent=item}
2378 \setbeamerfont{itemize subitem}{parent=subitem}
2379 \setbeamerfont{itemize subsubitem}{parent=subsubitem}
2380
2381 \setbeamerfont{enumerate item}{parent=item}
2382 \setbeamerfont{enumerate subitem}{parent=subitem}
2383 \setbeamerfont{enumerate subsubitem}{parent=subsubitem}

```



```

2384
2385 \setbeamerfont{itemize/enumerate body}{}
2386 \setbeamerfont{itemize/enumerate subbody}{size=\small}
2387 \setbeamerfont{itemize/enumerate subsubbody}{size=\footnotesize}
2388
2389 \setbeamerfont{description item}{parent=item}
2390
2391 \setbeamerfont{projected text}{parent={tiny structure}}
2392
2393 \setbeamerfont{abstract}{size=\small}
2394 \setbeamerfont{abstract title}{parent={abstract,structure},size=\normalsize}
2395
2396 \setbeamerfont{verse}{family=\rmfamily,shape=\itshape}
2397
2398 \setbeamerfont{quotation}{shape=\itshape}
2399 \setbeamerfont{quote}{parent=quotation}
2400
2401 \setbeamerfont{note page}{size=\small}
2402
2403 \mode
2404 <all>
2405 \</bmrfont>

```

7.2.4 Beamer inner theme

```

2406 \*bmrinner
2407 % Copyright 2021 by Walter Daems <walter.daems@uantwerpen.be>
2408 %
2409 % This file may be distributed and/or modified
2410 %
2411 % 1. under the LaTeX Project Public License and/or
2412 % 2. under the GNU Public License.
2413 %
2414 % See the file doc/licenses/LICENSE for more details.
2415
2416 \mode<presentation>
2417
2418 \setlength\parskip{0.5\baselineskip}
2419 \setlength\parindent{0em}
2420
2421 % use square (can also be circle or ball
2422 \setbeamertemplate{sections/subsections in toc}[square]
2423 \setbeamertemplate{itemize items}[square]
2424
2425 %\setbeamertemplate{description item}[align left]
2426
2427 \newif\if@noround
2428 \@noroundfalse
2429
2430 \newcommand*\uantwerpenleftshape[3][]{
2431   \newcommand\mycradius{0.05*(\getlength{\paperheight}-1.6)}%
2432   \coordinate (bl) at #2;
2433   \coordinate (tr) at #3;
2434   \if@noround

```

```

2435 \path[#1] (bl) rectangle (tr);
2436 \else
2437 \path[#1] (bl|-tr) -- (tr) -- (bl|-tr) -- ($ (bl)+(\mycradius},0)$)
2438 arc(-90:-180:{\mycradius}) -- cycle;
2439 \fi
2440 }
2441 \newcommand*\uantwerpenrightshape[3][]{
2442 \newcommand\mycradius{0.05*(\getlength{\paperheight}-1.6)}%
2443 \coordinate (bl) at #2;
2444 \coordinate (tr) at #3;
2445 \if@noround
2446 \path[#1] (bl) rectangle (tr);
2447 \else
2448 \path[#1] (bl|-tr) -- (tr) -- ($ (bl|-tr)+(0,{\mycradius})$)
2449 arc(0:-90:{\mycradius}) -- (bl) -- cycle;
2450 \fi
2451 }
2452
2453 \newcommand*\darken[2][0.5]{%
2454 \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
2455 \node (a) {#2};
2456 \fill[fill=black,opacity=#1] (a.south west) rectangle (a.north east);
2457 \end{tikzpicture}
2458 }
2459
2460 \newcommand\uantwerpenleftshape[4][]{
2461 \begin{tikzpicture}
2462 \uantwerpenleftshape[fill=black,fill opacity=0.0,text opacity=1,text=white,#1]{(-
2463 #2/2,-{#3/2})}{({#2/2},{#3/2})}
2464 \node[align=left,anchor=center] at (0,0) { \callout\ #4 };
2465 \end{tikzpicture}
2466 }
2467 \newcommand\callout[1][scale=0.70711]{
2468 \begin{tikzpicture}[#1]
2469 \fill[maincolor] (0.4,0) -- (0.5,0) -- (0.75,-0.15) -- (0.75,0) --
2470 (0.9,0) arc(-90:0:0.1) -- (1,0.65) arc(0:90:0.1) -- (0.1,0.75) arc
2471 (90:180:0.1) -- (0,0.1) arc(-180:-90:0.1) -- cycle;
2472 \foreach \x in {0.35,0.7} {
2473 \begin{scope}[shift={(\x,0.425)},scale=0.25]
2474 \fill[white] (0,0) circle[radius=0.5];
2475 \fill[white] (0.5,0) arc(0:-90:1) --
2476 (-0.5,-0.725) arc(-90:0:0.725) -- cycle;
2477 \end{scope}
2478 }
2479 \end{tikzpicture}
2480 }
2481
2482 \newcommand*\uantwerpenicon[1][scale=1]{
2483 \includegraphics[#1]{\iconfile}
2484 }
2485
2486 \newcommand\heading[1]{\par{\usebeamercolor{\maybeinverse heading}\color{fg}{\small\bfseries #
2487 \newcommand\subheading[1]{\par{

```

```

2488 \usebeamercolor{\maybeinverse
2489 subheading}\color{fg}{\footnotesize\it\bfseries #1-}}
2490
2491 \mode
2492 <all>
2493 \bmrinner

```

7.2.5 Beamer outer theme

```

2494 (*bmrouter)
2495 % Copyright 2021 by Walter Daems <walter.daems@uantwerpen.be>
2496 %
2497 % This file may be distributed and/or modified
2498 %
2499 % 1. under the LaTeX Project Public License and/or
2500 % 2. under the GNU Public License.
2501 %
2502 % See the file doc/licenses/LICENSE for more details.
2503
2504 \mode<presentation>
2505
2506 \newcommand*\getlength[1]{\strip@pt#1/28.45274}
2507 \newcommand*\pw{\getlength{\paperwidth}}%
2508 \newcommand*\ph{\getlength{\paperheight}}%
2509
2510 \newif\if@rhtext
2511 \@rhtextfalse
2512 \newif\if@lhtext
2513 \@lhtextfalse
2514 \newif\if@rqtext
2515 \@rqtextfalse
2516 \newif\if@lqtext
2517 \@lqtextfalse
2518 \newif\if@bhtext
2519 \@bhtextfalse
2520 \gdef\maybeinverse{}
2521
2522 \define@key{beamerframe}{noround}[true]{
2523 \expandafter\csname @noround#1\endcsname
2524 }
2525
2526 \define@key{beamerframe}{normal}[true]{
2527 \setbeamertemplate{title page}[main]
2528 \setbeamertemplate{section page}[main]%
2529 \setbeamertemplate{subsection page}[main]%
2530 \setbeamertemplate{background canvas}[normal]
2531 \gdef\maybeinverse{}
2532 }
2533
2534 \mode<handout|trans>
2535
2536 \define@key{beamerframe}{negativefill}[true]{
2537 }
2538

```

```

2539 \define@key{beamerframe}{negative}[true]{
2540 }
2541
2542 \mode
2543 <all>
2544
2545 \mode<beamer|second>
2546
2547 \define@key{beamerframe}{negativefill}[true]{
2548   \gdef\maybeinverse{inverse }%
2549   \usebeamercolor[fg]{\maybeinverse normal text}%
2550   \setbeamertemplate{title page}[negativefill]
2551   \setbeamertemplate{section page}[negative]%
2552   \setbeamertemplate{subsection page}[negative]%
2553   \setbeamertemplate{background canvas}[negativefill]%
2554 }
2555
2556 \define@key{beamerframe}{negative}[true]{
2557   \gdef\maybeinverse{inverse }%
2558   \usebeamercolor[fg]{\maybeinverse normal text}%
2559   \setbeamertemplate{title page}[negative]
2560   \setbeamertemplate{section page}[negative]%
2561   \setbeamertemplate{subsection page}[negative]%
2562   \setbeamertemplate{background canvas}[negative]%
2563 }
2564
2565 \mode
2566 <all>
2567
2568 \define@key{beamerframe}{graphicfill}[{\includegraphics[scale=0.1,min
2569   width=\paperwidth,min height=\paperheight]{Images/uantwerpen-01.jpg}}]{
2570   \gdef\maybeinverse{inverse }%
2571   \usebeamercolor[fg]{\maybeinverse normal text}%
2572   \setbeamertemplate{background canvas}[graphicfill]{#1}
2573 }
2574
2575 \define@key{beamerframe}{graphic}[{\includegraphics[scale=0.1,min
2576   width=\textwidth,min height=\textheight]{Images/uantwerpen-02.jpg}}]{
2577   \gdef\maybeinverse{inverse }%
2578   \usebeamercolor[fg]{\maybeinverse normal text}%
2579   \setbeamertemplate{background canvas}[graphic]{#1}
2580 }
2581
2582 \define@key{beamerframe}{lhgraphic}
2583   [{\includegraphics[scale=0.1,min width=0.5\paperwidth,min
2584     height=\textheight]{Images/uantwerpen-03.jpg}}]{
2585   \gdef\maybeinverse{}%
2586   \setbeamertemplate{background canvas}[lhgraphic]{#1}
2587   \@rhtexttrue
2588 }
2589
2590 \define@key{beamerframe}{lqgraphic}
2591   [{\includegraphics[scale=0.1,min width=0.5\paperwidth,min
2592     height=\textheight]{Images/uantwerpen-04.jpg}}]{

```

```

2593 \gdef\maybeinverse{}%
2594 \setbeamertemplate{background canvas}[lqgraphic]{#1}
2595 \@rqttexttrue
2596 }
2597
2598 \define@key{beamerframe}{rhgraphic}
2599 [{\includegraphics[scale=0.1,min width=0.5\paperwidth,min
2600   height=\textheight]{Images/uantwerpen-05.jpg}}]{
2601 \gdef\maybeinverse{}%
2602 \setbeamertemplate{background canvas}[rhgraphic]{#1}
2603 \@lhtexttrue
2604 }
2605
2606 \define@key{beamerframe}{rqgraphic}
2607 [{\includegraphics[scale=0.5,min width=0.5\paperwidth,min
2608   height=\textheight]{Images/uantwerpen-05.jpg}}]{
2609 \gdef\maybeinverse{}%
2610 \setbeamertemplate{background canvas}[rqgraphic]{#1}
2611 \@lqttexttrue
2612 }
2613
2614 \define@key{beamerframe}{thgraphic}
2615 [{\includegraphics[scale=0.5,min width=\paperwidth,min
2616   height=0.5\textheight]{Images/uantwerpen-06.jpg}}]{
2617 \gdef\maybeinverse{}%
2618 \setbeamertemplate{background canvas}[thgraphic]{#1}
2619 \@bhtexttrue
2620 }
2621
2622 \define@key{beamerframe}{bhgraphic}
2623 [{\includegraphics[scale=0.5,min width=\paperwidth,min
2624   height=0.5\textheight]{Images/uantwerpen-07.jpg}}]{
2625 \gdef\maybeinverse{}%
2626 \setbeamertemplate{background canvas}[bhgraphic]{#1}
2627 }
2628
2629 \BeforeBeginEnvironment{frame}{%
2630 \gdef\maybeinverse{}%
2631 \setbeamertemplate{title page}[main]%
2632 \setbeamertemplate{section page}[main]%
2633 \setbeamertemplate{subsection page}[main]%
2634 \setbeamertemplate{background canvas}[normal]%
2635 \usebeamercolor[fg]{normal text}%
2636 }
2637
2638 % The following does not work as \end{frame} is never executed by
2639 % beamer!
2640 % \AtEndEnvironment{frame}{\gdef\maybeinverse{}}
2641
2642 \NewEnviron{rhframe}[3][[]]{%
2643 \begin{frame}[#1]{#2}{#3}
2644 \begin{minipage}[t]{0.525\textwidth}
2645 ~
2646 \end{minipage}

```

```

2647 \begin{minipage}[t]{0.465\textwidth}
2648 \BODY
2649 \end{minipage}
2650 \end{frame}
2651 }
2652
2653 \NewEnviron{r3qframe}[3][\%
2654 \begin{frame}[#1]{#2}{#3}
2655 \begin{minipage}[t]{0.23\textwidth}
2656 ~
2657 \end{minipage}
2658 \begin{minipage}[t]{0.76\textwidth}
2659 \BODY
2660 \end{minipage}
2661 \end{frame}
2662 }
2663
2664 \NewEnviron{lhframe}[3][\%
2665 \begin{frame}[#1]{#2}{#3}
2666 \begin{minipage}[t]{0.465\textwidth}
2667 \BODY
2668 \end{minipage}
2669 \begin{minipage}[t]{0.525\textwidth}
2670 ~
2671 \end{minipage}
2672 \end{frame}
2673 }
2674
2675 \NewEnviron{l3qframe}[3][\%
2676 \begin{frame}[#1]{#2}{#3}
2677 \begin{minipage}[t]{0.77\textwidth}
2678 \BODY
2679 \end{minipage}
2680 \begin{minipage}[t]{0.22\textwidth}
2681 ~
2682 \end{minipage}
2683 \end{frame}
2684 }
2685
2686 \NewEnviron{bhframe}[3][\%
2687 \begin{frame}[#1]{#2}{#3}
2688 \BODY
2689 \end{frame}
2690 }
2691
2692 \NewEnviron{thframe}[3][\%
2693 \begin{frame}[#1]{#2}{#3}
2694 \BODY
2695 \end{frame}
2696 }
2697
2698 %%%%%%%%%%%
2699 % Order:
2700 % 1. option is executed

```

```

2701 % 2. frametitle is typeset
2702 % 3. canvas is typeset
2703 % 4. frame is typeset
2704 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2705
2706 \def\ps@uantwerpen@titlepage{%
2707   \setbeamercolor{title in title page}{parent=palette primary}
2708   \setbeamertemplate{footline}[empty]
2709   \@nameuse{ps@uantwerpen}
2710 }
2711
2712 \defbeamertemplate*{background canvas}{negative}[1]
2713 {%
2714   \gdef\appropriatelogo{\logomonowhite}%
2715   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}%
2716     \insertframenummer/\inserttotalframenummer}%
2717   \color{maincolor}\vrule width\paperwidth height\paperheight
2718 }
2719
2720 \defbeamertemplate*{background canvas}{negative}[1]
2721 {%
2722   \gdef\appropriatelogo{\logopos}%
2723   \gdef\appropriateslidenumber{}%
2724   \begin{tikzpicture}
2725     \clip (0,0) rectangle (\pw,\ph);
2726     \uantwerpenleftshape[fill=maincolor]{(0.8,0.8)}{(\pw-0.8,\ph-0.8)}
2727   \end{tikzpicture}
2728 }
2729
2730 \defbeamertemplate*{background canvas}{graphic}[1]
2731 {%
2732   \gdef\appropriatelogo{\logoneg}%
2733   \gdef\appropriateslidenumber{}%
2734   \begin{tikzpicture}
2735     \clip (0,0) rectangle (\pw,\ph);
2736     \node[align=center] at (0.5*\pw,0.5*\ph) {\#1};
2737   \end{tikzpicture}%
2738 }
2739
2740 \defbeamertemplate*{background canvas}{graphic}[1]
2741 {%
2742   \gdef\appropriatelogo{\logopos}%
2743   \gdef\appropriateslidenumber{}%
2744   \begin{tikzpicture}
2745     \clip (0,0) rectangle (\pw,\ph);
2746     \begin{scope}
2747       \uantwerpenleftshape[clip]{(0.8,0.8)}{(\pw-0.8,\ph-0.8)}
2748       \node[align=center] at (0.5*\pw,0.5*\ph) {\#1};
2749     \end{scope}
2750   \end{tikzpicture}%
2751 }
2752
2753 \defbeamertemplate*{background canvas}{lhgraphic}[1]
2754 {%

```

```

2755 \gdef\maybeinverse{}%
2756 \gdef\appropriatelogof{\logopos}%
2757 \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}%
2758   \insertframenumber/\inserttotalframenumber}%
2759 \pgfmathsetmacro\dx{0.5*\pw-1.2}%
2760 \pgfmathsetmacro\dy{\ph-1.6}%
2761 \begin{tikzpicture}
2762   \clip (0,0) rectangle (\pw,\ph);
2763   \begin{scope}
2764     \untwerpenleftshape[clip]{(0.8,0.8)}{(0.8+\dx,0.8+\dy)}
2765     \node[align=center] at (0.8+0.5*\dx,0.8+0.5*\dy) {#1};
2766   \end{scope}
2767 \end{tikzpicture}
2768 \@tempswattrue
2769 }
2770
2771 \defbeamertemplate*{background canvas}{lqgraphic}[1]
2772 {%
2773   \gdef\maybeinverse{}%
2774   \gdef\appropriatelogof{\logopos}%
2775   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}%
2776     \insertframenumber/\inserttotalframenumber}%
2777   \pgfmathsetmacro\dx{0.25*\pw-1.2}%
2778   \pgfmathsetmacro\dy{\ph-1.6}%
2779   \begin{tikzpicture}
2780     \clip (0,0) rectangle (\pw,\ph);
2781     \begin{scope}
2782       \untwerpenleftshape[clip]{(0.8,0.8)}{(0.8+\dx,0.8+\dy)}
2783       \node[align=center] at (0.8+0.5*\dx,0.8+0.5*\dy)
2784         {#1};
2785     \end{scope}
2786   \end{tikzpicture}
2787   \@tempswattrue
2788 }
2789
2790 \defbeamertemplate*{background canvas}{rhgraphic}[1]
2791 {%
2792   \gdef\maybeinverse{}%
2793   \gdef\appropriatelogof{\logopos}%
2794   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}%
2795     \insertframenumber/\inserttotalframenumber}%
2796   \pgfmathsetmacro\dx{0.5*\pw-1.2}%
2797   \pgfmathsetmacro\dy{\ph-1.6}%
2798   \begin{tikzpicture}
2799     \clip (0,0) rectangle (\pw,\ph);
2800     \begin{scope}[shift={(0.5*\pw,0)}]
2801       \untwerpenrightshape[clip]{(0.4,0.8)}{(0.4+\dx,0.8+\dy)}
2802       \node[align=center] at (0.8+0.5*\dx,0.8+0.5*\dy) {#1};
2803     \end{scope}
2804   \end{tikzpicture}
2805   \@tempswattrue
2806 }
2807
2808 \defbeamertemplate*{background canvas}{rqgraphic}[1]

```



```

2809 {%
2810   \gdef\maybeinverse{}%
2811   \gdef\appropriatelogo{\logopos}%
2812   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}%
2813     \insertframenumber/\inserttotalframenumber}%
2814   \pgfmathsetmacro\dx{0.25*\pw-1.2}%
2815   \pgfmathsetmacro\dy{\ph-1.6}%
2816   \begin{tikzpicture}
2817     \clip (0,0) rectangle (\pw,\ph);
2818     \begin{scope}[shift={(0.75*\pw,0)}]
2819       \untwerpenrightshape[clip] {(0.4,0.8)}{(0.4+\dx,0.8+\dy)}
2820       \node[align=center] at (0.8+0.5*\dx,0.8+0.5*\dy) {\#1};
2821     \end{scope}
2822   \end{tikzpicture}
2823   \@tempwatrue
2824 }
2825
2826 \defbeamertemplate*{background canvas}{thgraphic}[1]
2827 {%
2828   \gdef\maybeinverse{}%
2829   \gdef\appropriatelogo{\logopos}%
2830   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}%
2831     \insertframenumber/\inserttotalframenumber}%
2832   \pgfmathsetmacro\dx{\pw-1.6}%
2833   \pgfmathsetmacro\dy{0.5*\ph-0.8}%
2834   \begin{tikzpicture}
2835     \clip (0,0) rectangle (\pw,\ph);
2836     \begin{scope}[shift={(0,0.5*\ph)}]
2837       \untwerpenleftshape[clip] {(0.8,0)}{(0.8+\dx,\dy)}
2838       \node[align=center] at (0.8+0.5*\dx,0.5*\dy) {\#1};
2839     \end{scope}
2840   \end{tikzpicture}
2841   \@tempwatrue
2842 }
2843
2844 \defbeamertemplate*{background canvas}{bhgraphic}[1]
2845 {%
2846   \gdef\maybeinverse{}%
2847   \gdef\appropriatelogo{\logopos}%
2848   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}%
2849     \insertframenumber/\inserttotalframenumber}%
2850   \pgfmathsetmacro\dx{\pw-1.6}%
2851   \pgfmathsetmacro\dy{0.5*\ph-0.8}%
2852   \begin{tikzpicture}
2853     \clip (0,0) rectangle (\pw,\ph);
2854     \begin{scope}[shift={(0,0.8)}]
2855       \untwerpenleftshape[clip] {(0.8,0)}{(0.8+\dx,\dy)}
2856       \node[align=center] at (0.8+0.5*\dx,0.5*\dy) {\#1};
2857     \end{scope}
2858   \end{tikzpicture}
2859   \@tempwatrue
2860 }
2861
2862

```

```

2863 \defbeamertemplate*{background canvas}{normal}
2864 {%
2865   \gdef\maybeinverse{}%
2866   \gdef\appropriatelogos{\logopos}%
2867   \gdef\appropriateslidenumber{\usebeamercolor{pageno in
2868     head/foot}\insertframenummer/\inserttotalframenummer}%
2869 }
2870
2871
2872 \defbeamertemplate*{title page}{main}[1][ ]
2873 {%
2874   \thispagestyle{uantwerpen@titlepage}%
2875   \begin{tikzpicture}
2876     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
2877     \node[anchor=center] at (0.5*\textwidth,0.75*\ph)
2878       {\includegraphics[height=.9\logounitheight]{\logopos}};
2879     \node[
2880       text width=0.98\textwidth,
2881       text=basecolor,
2882       align=center] at (0.5*\textwidth,0.5*\ph) {
2883       \begin{beamercolorbox}[wd=\textwidth,center]{title in title page}
2884         \LARGE\bfseries\inserttitle\[\[1ex]
2885         \usebeamercolor{fg}{subtitle in title page}
2886         \color{fg}\large\bfseries\insertsubtitle
2887       \end{beamercolorbox}
2888     };
2889     \node[
2890       text width=0.98\textwidth,
2891       color=basecolor,
2892       align=center] at (0.5*\textwidth,0.25*\ph) {
2893       \begin{beamercolorbox}[wd=\textwidth,center]{author in title page}
2894         \large\bfseries\insertauthor
2895       \end{beamercolorbox}
2896     };
2897     \node[
2898       text width=0.98\textwidth,
2899       color=basecolor,
2900       align=center] at (0.5*\textwidth,0.15*\ph) {
2901       \begin{beamercolorbox}[wd=\textwidth,center]{date in title page}
2902         \normalsize\bfseries\insertdate
2903       \end{beamercolorbox}
2904     };
2905   \end{tikzpicture}
2906 }
2907
2908 \defbeamertemplate*{title page}{negative}[1][ ]
2909 {
2910   \begin{tikzpicture}
2911     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
2912     \node[
2913       text width=0.98\textwidth,
2914       align=center] at (0.5*\textwidth,0.5*\ph) {
2915       \begin{beamercolorbox}[wd=\textwidth,center]{inverse title in title page}
2916         \LARGE\bfseries\inserttitle\[\[1ex]

```

```

2917     \usebeamercolor[fg]{\maybeinverse subtitle in title page}
2918     \color{fg}\large\bfseries\insertsubtitle
2919   \end{beamercolorbox}
2920 };
2921 \node[
2922   text width=0.98\textwidth,
2923   align=center,] at (0.5*\textwidth,0.25*\ph) {
2924   \begin{beamercolorbox}[wd=\textwidth,center]{inverse author in title page}
2925     \large\bfseries\insertauthor
2926   \end{beamercolorbox}
2927 };
2928 \node[
2929   text width=0.98\textwidth,
2930   color=basecolor,
2931   align=center] at (0.5*\textwidth,0.15*\ph) {
2932   \begin{beamercolorbox}[wd=\textwidth,center]{inverse date in title page}
2933     \normalsize\bfseries\insertdate
2934   \end{beamercolorbox}
2935 };
2936 \end{tikzpicture}
2937 }
2938
2939 \defbeamertemplate*{title page}{negativefill}[1] []
2940 {
2941   \thispagestyle{uantwerpen@titlepage}
2942   \begin{tikzpicture}
2943     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
2944     \node[anchor=center] at (0.5*\textwidth,0.75*\ph)
2945     {\includegraphics[height=.9\logounitheight]{\logomonowhite}};
2946     \node[
2947       draw,rectangle,
2948       text width=0.98\textwidth,
2949       color=maincolor,
2950       align=center] at (0.5*\textwidth,0.5*\ph) {
2951       \begin{beamercolorbox}[wd=\textwidth,center]{inverse title in title page}
2952         \LARGE\bfseries\inserttitle\ [1ex]
2953         \usebeamercolor[fg]{inverse subtitle in title page}
2954         \color{fg}\large\bfseries\insertsubtitle
2955       \end{beamercolorbox}
2956     };
2957     \node[
2958       text width=0.98\textwidth,
2959       color=maincolor,
2960       align=center] at (0.5*\textwidth,0.25*\ph) {
2961       \begin{beamercolorbox}[wd=\textwidth,center]{inverse author in title page}
2962         \large\bfseries\insertauthor
2963       \end{beamercolorbox}
2964     };
2965     \node[
2966       text width=0.98\textwidth,
2967       color=basecolor,
2968       align=center] at (0.5*\textwidth,0.15*\ph) {
2969       \begin{beamercolorbox}[wd=\textwidth,center]{inverse date in title page}
2970         \normalsize\bfseries\insertdate

```

```

2971     \end{beamercolorbox}
2972   };
2973   \end{tikzpicture}
2974 }
2975
2976 \defbeamertemplate*{section page}{main}[1] []
2977 {%
2978   \begin{tikzpicture}
2979     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
2980     \node[
2981       text width=0.98\textwidth,
2982       text=basecolor,
2983       align=center] at (0.5*\textwidth,0.55*\ph) {
2984       \begin{beamercolorbox}[wd=\textwidth,center]{section title}
2985         \Large\bfseries\insertsectionnumber.\~\insertsection
2986       \end{beamercolorbox}
2987     };
2988   \end{tikzpicture}
2989 }
2990
2991 \defbeamertemplate*{subsection page}{main}[1] []
2992 {%
2993   \begin{tikzpicture}
2994     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
2995     \node[
2996       text width=0.98\textwidth,
2997       text=basecolor,
2998       align=center] at (0.5*\textwidth,0.55*\ph) {
2999       \begin{beamercolorbox}[wd=\textwidth,center]{section title}
3000         \Large\bfseries\insertsectionnumber.\~\insertsection
3001       \end{beamercolorbox}
3002     };
3003     \node[
3004       text width=0.98\textwidth,
3005       text=basecolor,
3006       align=center] at (0.5*\textwidth,0.45*\ph) {
3007       \begin{beamercolorbox}[wd=\textwidth,center]{subsection title}
3008         \large\bfseries\insertsubsection
3009       \end{beamercolorbox}
3010     };
3011   \end{tikzpicture}
3012 }
3013
3014 \defbeamertemplate*{section page}{negative}[1] []
3015 {
3016   \begin{tikzpicture}
3017     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3018     \node[
3019       text width=0.98\textwidth,
3020       text=basecolor,
3021       align=center] at (0.5*\textwidth,0.55*\ph) {
3022       \begin{beamercolorbox}[wd=\textwidth,center]{inverse section title}
3023         \Large\bfseries\insertsectionnumber.\~\insertsection
3024       \end{beamercolorbox}

```

```

3025     };
3026     \end{tikzpicture}
3027 }
3028
3029 \defbeamertemplate*{subsection page}{negative}[1] []
3030 {
3031     \begin{tikzpicture}
3032         \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3033         \node[
3034             text width=0.98\textwidth,
3035             text=basecolor,
3036             align=center] at (0.5*\textwidth,0.55*\ph) {
3037             \begin{beamercolorbox}[wd=\textwidth,center]{inverse section title}
3038                 \Large\bfseries\insertsectionnumber.\sim\insertsection
3039             \end{beamercolorbox}
3040         };
3041         \node[
3042             text width=0.98\textwidth,
3043             text=basecolor,
3044             align=center] at (0.5*\textwidth,0.45*\ph) {
3045             \begin{beamercolorbox}[wd=\textwidth,center]{inverse subsection title}
3046                 \large\bfseries\insertsubsection
3047             \end{beamercolorbox}
3048         };
3049     \end{tikzpicture}
3050 }
3051
3052 \defbeamertemplate*{footline}{empty}
3053 {
3054 }
3055
3056 \defbeamertemplate*{footline}{normal}
3057 {%
3058     \leavevmode%
3059     \hbox{\begin{beamercolorbox}
3060         [wd=.5\paperwidth,ht=0.55cm,dp=0.25cm,left,leftskip=.8cm
3061         plus1fill]{author in head/foot}%
3062         \includegraphics[height=0.35\logounitheight]{\appropriatelogo}
3063         \hskip0pt plus 1filll ~
3064     \end{beamercolorbox}%
3065     \begin{beamercolorbox}[wd=.5\paperwidth,ht=0.55cm,dp=0.25cm,
3066         right,rightskip=.8cm plus1filll]{\maybeinverse pageno in head/foot}%
3067         \usebeamerfont{pageno in head/foot}\hskip0pt plus 1filll
3068         \appropriateslidenumber
3069     \end{beamercolorbox}}%
3070     \vskip0pt%
3071 }
3072
3073 \defbeamertemplate*{frametitle}{empty}
3074 {
3075 }
3076
3077 \defbeamertemplate*{frametitle}{normal}
3078 {%

```

```

3079 \vskip0.75cm%
3080 \if@rhtext%
3081 \@tempdima=0.5\textwidth%
3082 \@tempdimb=0.5\textwidth%
3083 \advance\@tempdima by0.5\beamer@leftmargin%
3084 \advance\@tempdimb by-0.5\beamer@leftmargin%
3085 \else%
3086 \if@rqtext%
3087 \@tempdima=0.23\textwidth%
3088 \@tempdimb=0.77\textwidth%
3089 \else%
3090 \if@lhtext%
3091 \@tempdima=0em%
3092 \@tempdimb=0.5\textwidth%
3093 \advance\@tempdimb by-0.5\beamer@leftmargin%
3094 \else%
3095 \if@lqtext%
3096 \@tempdima=0em%
3097 \@tempdimb=0.77\textwidth%
3098 \else%
3099 \if@bhtext%
3100 \@tempdima=0em%
3101 \@tempdimb=\textwidth%
3102 \vskip0.5\textheight%
3103 \else%
3104 \@tempdima=0em%
3105 \@tempdimb=\textwidth%
3106 \fi%
3107 \fi%
3108 \fi%
3109 \fi%
3110 \fi%
3111 \hskip\@tempdima%
3112 \begin{beamercolorbox}[wd=\@tempdimb]{\maybeinverse frametitle}%
3113 \usebeamerfont{frametitle}\insertframetitle\[\[0.5ex]%
3114 \ifx\insertframesubtitle\@empty%
3115 {\usebeamerfont{framesubtitle}%
3116 \usebeamerfont{framesubtitle}[fg]{\maybeinverse framesubtitle}~\strut\par}%
3117 \vskip-1ex%
3118 \else%
3119 {\usebeamerfont{framesubtitle}%
3120 \usebeamerfont{framesubtitle}[fg]{\maybeinverse framesubtitle}%
3121 \insertframesubtitle\strut\par}%
3122 \fi%
3123 \if@tempswa\else\vskip-.3cm\fi% set inside beamercolorbox... evil here...
3124 \end{beamercolorbox}%
3125 }
3126
3127 \newdimen\xlleft
3128 \newdimen\ylleft
3129 \newdimen\xupright
3130 \newdimen\yupright
3131 \newdimen\xcurrent
3132 \newdimen\ycurrent

```

```

3133 \newcommand*\extractlloleft[1]{\path (#1);\pgfgetlastxy{\xlloleft}{\ylloleft};}
3134 \newcommand*\extractupright[1]{\path (#1);\pgfgetlastxy{\xupright}{\yupright};}
3135 \newcommand*\extractcurrent[1]{\path (#1);\pgfgetlastxy{\xcurrent}{\ycurrent};}
3136
3137 \DeclareRobustCommand\place{\@ifnextchar[{\@place}{\@place[align=left] }}
3138 \def\@place[#1] at (#2,#3)#4{
3139   \begin{tikzpicture}[overlay,remember picture]
3140     \extractlloleft{$(current page.south west)$}
3141     \extractupright{$(current page.north east)$}
3142     \node[#1] at
3143       ({\xlloleft*(1-#2)+\xupright*#2},{\ylloleft*(1-#3)+\yupright*#3}) {#4};
3144   \end{tikzpicture}
3145 }
3146
3147 \mode
3148 <all>
3149 </bmrouter>

```

Change History

v1.0	General: Consolidated uacoursetext class and uamasterthesis class 1 Added option qr 38 Added option titlepagenoartwork 38 Added option titlepagetableonly 38	General: Added diploma codes for Faculty of Applied Economics . 1 Added diploma code documentation 11
v1.1	\diploma : Fixed typo on programme's name (e-umlaut) 55 General: Small bugfixes and 'filled' option 1 Added option user documentation 8 Made raggedright conditional on option 'filled', because it can't be undone 64	v1.7 \maketitle : Embedded babel translations of keywords into title page 66, 69 General: Added babel translations of elements of master's thesis title page 1 Added babel tags of elements of master's thesis title page . . . 44
v1.2	General: Added lmodern package and increased headheight to 13.7pt to please Fancyhdr . . . 1 Added lmodern package to please MikTeX 40 Increased headheight to please Fancyhdr 64	v1.8 \makefinalpage : Inserted blank one but last page 69 \maketitle : Allowed for empty senderrole 77 \signature : Added signature . . . 59 General: Corrected minor typographic mistakes, added signature and solved problems with shell escape 1 Added missing packages ifmtarg and shellesc 40 Allowed for empty senderrole . 78
v1.3	\makefinalpage : Changed eso-pic for tikz 69, 71 \maketitle : Changed eso-pic for tikz 69 General: Minor bugfixes, abandonment of a few packages, font freedom 1 Abandoned use of cmbright - no more font dictatorship for theses and courses 40 Added inclusion of background package 41	v1.81 General: Bugfixes for release v1.8 . 1 Apparently shellesc is still missing from quite a number of installations, therefore, conditional loading 40
v1.4	General: Implemented uantwerpenletter class 1 Implemented letter class 38	v1.9 General: Integrated uantwerpenexam class into package 1 Added etoolbox for convenience reasons 40 Implemented uantwerpenexam class 38
v1.5	\maketitle : Implemented new footer 77 General: Replaced bottom arcs in footer of letter by official PDF versions 1	v2.0 \makefinalpage : Implemented final page 74, 77 \maketitle : Implemented title page 71 General: Implemented uantwerpenphdthesis class into package 1 Implemented uantwerpenphdthesis class . . . 38
v1.6	\diploma : Added diploma codes . 55	

Removed package ifmtarg because unreliable	40	General: Added option for diploma without specialization for EM	1
Updated diploma code documentation to incorporate PhD degrees	11	v2.5 \depot : Made the specification of a depot number optional	56
v2.1 \engdut : Increased intercolumn spacing for engdut	81	\insertsolutionspagepartial : Corrected for 'one page too early' in solutionspagepartial . .	83
\extrainfo : Changed default to empty	61	\maketitle : Corrected formatting in case of absent ISBN or depot number	71
\maketitle : Corrected information page (p4) jury spacing	71	\programme : Shortened 'voorbereidingsprogramma' and 'schakelprogramma' tags .	54
\subtitle : Added subtitle to phd text	48	\publisher : changed publisher to universitas in default	49
Ensured that subtitle is really optional by adding default space value	48	General: changed publisher to universitas in example	17
General: Bugfix release after promotion event on research day	1	v3.0 \facultyacronym : Changed REC in RE, TEW in BE and WET in WE (according to official naming scheme)	48
Added appropriate \appendix command	65	General: Adapted to the new house style of UAntwerpen and added a beamer template	1
Allow for setting the multiple choice mark symbol	82	Added iftex	40
Corrected erroneous line breaking	82	v3.1 General: Renamed generic images to be unique for TexLive distribution	1
Corrected spacing in title + exampart	78	v3.2 General: Small bugfixes (e.g., frame numbering instead of page numbering)	1
v2.2 General: Improved visibility of chapter numbers by adding a white outline	1	v4.0 \diploma : Discontinued: removed all diploma codes	55
Added white chapter number outline	65	\facultyacronym : This function is now obsolete	48
Corrected spacing	65	General: Last update of house style (phdthesis coursetext and bamathesis), added uantwerpenreport class, improvements based on use feedback and major rework to benefit from expl3, removed all diploma codes to ease maintainability	1
v2.3 \diploma : Added diploma level . .	55	Removed diploma codes, as too many faculties are requesting to maintain them	11
\extrainfo : The command \extrainfo now allows for an extra (optional) first argument 'firstpage'	61	Removed option qr again	38
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