

The istaustriathesis class^{*}

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March 7, 2022

Abstract

This class provides a $\text{\LaTeX} 2_{\varepsilon}$ template for theses at IST Austria.

^{*}This document corresponds to istaustriathesis v1.3, dated 2022/03/07.

Contents

1	Introduction	3
2	Known Issues	3
3	Related Work	3
4	Usage for Document Authors	3
4.1	Data	3
4.1.1	Textual Data	3
4.1.2	Persons	4
4.1.3	Dates	4
4.1.4	List Data	4
4.2	Layout	5
5	Usage for Class Writers	6
5.1	Data	6
5.2	Layout	7
6	Implementation	7
6.1	Initialization	7
6.1.1	Class Options	7
6.1.2	Loaded Class and Packages	8
6.1.3	Page Layout	8
6.1.4	Fonts	8
6.2	Data	9
6.2.1	Dates	9
6.2.2	Textual Data	9
6.2.3	Persons	10
6.2.4	Declarations	11
6.2.5	License Types	12
6.3	Layout	14
6.3.1	Setup	14
6.3.2	Title Page	15
6.3.3	Committee Page	16
6.3.4	Statement Page	17
6.3.5	Front Matter Material	19
7	Change History	20
	Index	21

1 Introduction

This class provides a L^AT_EX 2_ε template for theses at IST Austria. Further information on the document class and accompanying support can be found at <https://gitlab.com/ThomasAUZINGER/istaustriathesis>. Further guidelines may apply to both the format and structure of certain theses. These can be found at <https://phd.pages.ist.ac.at/student-resources/>. Thesis authors are advised to consult Section 4 for a documentation of all relevant commands. Information for class developers is provided in Section 5.

2 Known Issues

This class is incompatible with the `minitoc` package as of version 60, due to the incompatibility of the underlying `memoir` class. Use the `titletoc` package as a replacement.

3 Related Work

This document class was developed on the basis of the `vutinfth` document class for all theses at the Faculty of Informations at the TU Wien. See <https://gitlab.com/ThomasAUZINGER/vutinfth> for details.

4 Usage for Document Authors

This section contains relevant information for authors of theses that are based on the `istaustriathesis` document class.

4.1 Data

To allow the generation of the title pages, signature fields, statements, etc., several pieces of information have to be set by the author using the commands in the subsequent sections. We discern several categories of data: *(i)* textual data, which is given by a simple text string, *(ii)* persons, which are defined by their names, optional titles, and their gender, as well as, *(iii)* dates and *(iv)* list data, which allow the selection of one argument from a list of permissible arguments.

4.1.1 Textual Data

<code>\settitle</code>	All commands in this section are called with one mandatory argument, e.g., as
<code>\setsubtitle</code>	<code>\command{⟨text⟩}</code> , where <code>⟨text⟩</code> defines the content of the commands.
<code>\setisssn</code>	
<code>\setisbn</code>	

Command	Role	Optional
<code>\settitle</code>	Title of the thesis	No
<code>\setsubtitle</code>	Subtitle of the thesis	Yes
<code>\setissn</code>	ISSN of the theses at IST Austria	No
<code>\setisbn</code>	ISBN of the thesis	Yes

4.1.2 Persons

`\setauthor` All commands in this section are called with four mandatory arguments, e.g., as
`\setsupervisor` `\command{\langle pretitle \rangle \langle name \rangle \langle posttitle \rangle \langle affiliation \rangle}`, where `\langle name \rangle` defines
`\setcosupervisor` both the first name(s) and family name(s) of the person. A title that is placed
`\setcommitteememberI` before the name is assigned with `\langle pretitle \rangle`, while a trailing title is given with
`\setcommitteememberII` `\langle posttitle \rangle`. Both `\langle pretitle \rangle` and `\langle posttitle \rangle` can be left empty, to indicate an ab-
`\setcommitteememberIII` sence of such a title; the insertion of appropriate glue between titles and names is
`\setcommitteememberIIII` handled by the `istaustriathesis` class. The declaration of the person's affilia-
`\setdefensechair` tion via `\langle affiliation \rangle` usually contains the institution, its city, and its country. The
following persons can be set:

Command	Role	Optional
<code>\setauthor</code>	Author of the thesis	No
<code>\setsupervisor</code>	Main supervisor of the thesis	No
<code>\setcosupervisor</code>	Cosupervisor of the thesis	Yes
<code>\setcommitteememberI</code>	First committee member	No
<code>\setcommitteememberII</code>	Second committee member	No
<code>\setcommitteememberIII</code>	Third committee member	Yes
<code>\setcommitteememberIIII</code>	Fourth committee member	Yes
<code>\setdefensechair</code>	Chair of the committee	No

4.1.3 Dates

`\setdate` All commands in this section are called with three madatory arguments, e.g., as
`\command{\langle day \rangle \langle month \rangle \langle year \rangle}`. The syntax is identical to the last three
arguments of the `\newdate` command of the `datetime` package, from which these
commands derive. The following dates can be set:

Command	Role	Optional
<code>\setdate</code>	Signing date	No

4.1.4 List Data

All commands in this section are called with at least one madatory argument called
`\langle list \rangle`, e.g., as `\command{\dots \langle list \rangle \dots}`, where `\langle list \rangle` is given one element from a set
of possible arguments.

`\setcopyright` The type of copyright license can be chosen as restririctive or as one of the Creative

Commons (CC) licenses (see <https://creativecommons.org/choose/> for further information on possible choices).

Command	Options	Description
<code>\setlicense{<list>}</code>	restricted	Specifies that all rights are reserved.
	cc-by	Specifies the CC BY 4.0 License.
	cc-by-sa	Specifies the CC BY-SA 4.0 License.
	cc-by-nd	Specifies the CC BY-ND 4.0 License.
	cc-by-nc	Specifies the CC BY-NC 4.0 License.
	cc-by-nc-sa	Specifies the CC BY-NC-SA 4.0 License.
	cc-by-nc-nd	Specifies the CC BY-NC-ND 4.0 License.

4.2 Layout

Most of the data that is supplied with the commands of the previous sections is used to generate the front matter of the thesis. It consists of obligatory items such as the title page(s) and the statement of originality as well as optional items such as the acknowledgements or the abstract in different languages. In the remainder of this section, the available items of the front matter are given.

<code>\addtitlepage</code>	Used as <code>\addtitlepage</code> , it generates the title page. The necessary pieces of information have to be set beforehand (as described in Section 4.1). This command is usually used directly after <code>\begin{document}\frontmatter</code> .
<code>\committeepage</code>	Used as <code>\addstatementpage</code> , it generates the signature page of the committee. The necessary pieces of information have to be set beforehand (as described in Section 4.1). This command is usually used directly after <code>\addtitlepage</code> .
<code>\addstatementpage</code>	Used as <code>\addstatementpage</code> , it generates a page with the statement of originality and the copyright notice as well as the signature field of the author. The necessary pieces of information have to be set beforehand (as described in Section 4.1). This command is usually used directly after <code>\addcommitteepage</code> .
<code>abstract</code> <code>abstract*</code>	Used as <code>\begin{abstract}<text>\end{abstract}</code> , this environment generates a chapter with the abstract. Use the starred version, i.e., <code>abstract*</code> , to remove the table of content entry of this environment.
<code>acknowledgements</code> <code>acknowledgements*</code>	Used as <code>\begin{acknowledgements}<text>\end{acknowledgements}</code> , this environment generates a chapter with the acknowledgements. Use the starred version, i.e., <code>acknowledgements*</code> , to remove the table of content entry of this environment.
<code>aboutauthor</code> <code>aboutauthor*</code>	Used as <code>\begin{aboutauthor}<text>\end{aboutauthor}</code> , this environment generates a chapter with information about the author. Use the starred version, i.e., <code>aboutauthor*</code> , to remove the table of content entry of this environment.
<code>publicationlist</code> <code>publicationlist*</code>	Used as <code>\begin{publicationlist}<text>\end{publicationlist}</code> , this environment generates a chapter with the publication list used in the thesis as well as a

description of the author’s contributions to them. Use the starred version, i.e., `publicationlist*`, to remove the table of content entry of this environment. Individual citations of the publications can be added using the `\bibentry{<bibid>}` command.

5 Usage for Class Writers

To accomodate shifting requirements, the `istaustriathesis` class provides various convenience functions that allow the modification and extension of its functionality.

5.1 Data

To compose several parts of the thesis layout, input from the thesis author is required. For the `istaustriathesis` class, this is realized by the commands provided in Section 4.1. Additional data can be defined with the the commands in the remainder of this section.

`\CreateData` Used as `\CreateData{<name>}`, it generates a command `\set{<name>}`. Used as `\set{<name>}{<string>}`, the newly created command assigns the value `<string>` to the internal variable `\istaustriathesis@data@<name>`. The variable is initialized with an error value to alert the user of the fact that `<string>` was not supplied via the `\set{<name>}` command. Furthermore, a command `\istaustriathesis@data@<name>@def` is created, to increase source code readability when verifying the existence of a specific data item. See Section 6.2.4 for examples.

`\CreatePerson` Used as `\CreatePerson{<name>}`, it generates a command `\set{<name>}`. Used as `\set{<name>}{<pretitle>}{<personname>}{<posttitle>}{<affiliation>}`, the newly created command assigns the supplied values to the corresponding internal variables `\istaustriathesis@person@<name>@...` as given in the table below.

Argument	Internal Variable
	<code>\istaustriathesis@person@<name>@def</code>
<code><pretitle></code>	<code>\istaustriathesis@person@<name>@pretitle</code>
<code><personname></code>	<code>\istaustriathesis@person@<name>@name</code>
<code><posttitle></code>	<code>\istaustriathesis@person@<name>@posttitle</code>
<code><affiliation></code>	<code>\istaustriathesis@person@<name>@affiliation</code>

The command `\istaustriathesis@person@<name>@def` is created to increase source code readability when verifying the existence of a specific person. Furthermore, the command `\istaustriathesis@person@<name>@name` returns the person’s name. The name can be extended by the person’s titles using `\istaustriathesis@person@<name>@fullname` and – even further – with the person’s affiliation using `\textellipsis{<name>@fullnameaffiliation}`. See Section 6.2.4 for examples.

5.2 Layout

Several key elements in the layout of the frontmatter are encapsulated to allow a convenient extension of this functionality.

<code>\CommitteeSummaryBlock</code>	Used as <code>\CommitteeSummaryBlock</code> , it generates a list of the names of all committee members.
<code>\ApprovalBlock</code>	Used as <code>\ApprovalBlock</code> , it generates a description of the thesis that is approved.
<code>\SignatureBlock</code>	Used as <code>\SignatureBlock{<role>}{<name>}</code> , it generates a signature field for the given person stating the person's role in the committee and the person's name.
<code>\CommitteeBlock</code>	Used as <code>\CommitteeBlock</code> , it generates a list of signature fields for all committee members.
<code>\CopyrightBlock</code>	Used as <code>\CopyrightBlock</code> , it generates the copyright statement.
<code>\ISSNBlock</code>	Used as <code>\ISSNBlock</code> , it generates the ISSN information.
<code>\ISBNBlock</code>	Used as <code>\ISBNBlock</code> , it generates the ISBN information.
<code>\StatementBlock</code>	Used as <code>\StatementBlock</code> , it generates the statement of originality.
<code>\AddTitlePage</code>	Used as <code>\AddTitlePage</code> , it generates the title page containing the appropriate blocks and the logo.
<code>\AddCommitteePage</code>	Used as <code>\AddCommitteePage</code> , it generates the approval and signing page containing the appropriate blocks.
<code>\AddStatementPage</code>	Used as <code>\AddStatementPage</code> , it generates the copyright and statement page containing the appropriate blocks.
<code>SFFont</code>	Alters the sans serif font inside the environment. Called with one mandatory argument as <code>\begin{SFFont}{<family>}</code> , which determines the sans serif font family that should be used, e.g., <code>phv</code> for Helvetica.

6 Implementation

6.1 Initialization

6.1.1 Class Options

Pass the options to the underlying memoir class.

```

1 \DeclareOption*{%
2   \PassOptionsToClass{\CurrentOption}{memoir}%
3 }%
4 \ProcessOptions\relax

```

6.1.2 Loaded Class and Packages

The `istaustriathesis` class is based on the `memoir` class.

```
5 \LoadClass[a4paper,12pt]{memoir}%
6 \chapterstyle{veelo}%
```

The following packages are required for the functionality and style of the document class.

```
7 \RequirePackage[scaled]{helvet}%
8 \RequirePackage{lmodern}%
9 \RequirePackage{courier}%
10 \RequirePackage{textcomp}%
11 \RequirePackage[T1]{fontenc}%
12 \RequirePackage[english]{babel}%
13 \RequirePackage{datetime2,datetime2-calc}%
14 \RequirePackage{calc}%
15 \RequirePackage{etoolbox}%
16 \RequirePackage{graphicx}%
17 \graphicspath{{graphics/}}%
```

6.1.3 Page Layout

Set the margin to one inch on all sides.

```
18 \setlrmarginsandblock{1in}{1in}{*}%
19 \setulmarginsandblock{1in}{1in}{*}%
20 \checkandfixthelayout
```

6.1.4 Fonts

Initializes the font sizes.

```
\istaustriathesis@HUGE
\istaustriathesis@huge
\istaustriathesis@LARGE
\istaustriathesis@Large
\istaustriathesis@large
\istaustriathesis@normalsize
\istaustriathesis@small
\istaustriathesis@footnotesize
\istaustriathesis@scriptsize
\istaustriathesis@tiny

21 \newcommand{\istaustriathesis@Huge}{\Huge}%
22 \newcommand{\istaustriathesis@huge}{\huge}%
23 \newcommand{\istaustriathesis@LARGE}{\LARGE}%
24 \newcommand{\istaustriathesis@Large}{\Large}%
25 \newcommand{\istaustriathesis@large}{\large}%
26 \newcommand{\istaustriathesis@normalsize}{\normalsize}%
27 \newcommand{\istaustriathesis@small}{\small}%
28 \newcommand{\istaustriathesis@footnotesize}{\footnotesize}%
29 \newcommand{\istaustriathesis@scriptsize}{\scriptsize}%
30 \newcommand{\istaustriathesis@tiny}{\tiny}%
```

SFFont Selects the given font family as sans serif font.

```
31 \newenvironment{SFFont}[1]{%
```


Stores the current sans serif font in `\istaustriathesis@f@family@tmp` and changes to the given sans serif font.

```

32 \begingroup
33   \sffamily
34   \global\let\istaustriathesis@f@family@tmp=\f@family
35 \endgroup
36 \renewcommand{\sfdefault}{#1}%

```

In case the outer scope is already sans serif, the new font has to be activated.

```

37 \ifdefstrequal{\f@family}{\istaustriathesis@f@family@tmp}{%
38   \sffamily}{}%
39 }{%

```

The scope of the font change is the environment itself. Thus, no cleanup code is required in case the outer scope was already sans serif.

```

40 \renewcommand{\sfdefault}{\istaustriathesis@f@family@tmp}%
41 }%

```

6.2 Data

6.2.1 Dates

`\setdate` Creates the internal storage for the signing date.

```

42 \newcommand{\setdate}[3]{%
43   \DTMsavenoparsedate{istaustriathesis@date@signing}{#1}{#2}{#3}{-1}%
44 }%

```

6.2.2 Textual Data

`\istaustriathesis@def@data` Creates the internal storage for simple data entries.

```

45 \newcommand{\istaustriathesis@def@data}[2]{%
46   \@namedef{istaustriathesis@data@#1@def}{}%
47   \@namedef{istaustriathesis@data@#1}{#2}%
48 }%

```

`\istaustriathesis@def@data@invalid` Initializes the internal storage with error messages.

```

49 \newcommand{\istaustriathesis@def@data@invalid}[2]{%
50   \@namedef{istaustriathesis@data@#1@error}{%
51     \ClassError{istaustriathesis}{No #2 issued}{Set #1 with #2.}%
52   }%
53   \@namedef{istaustriathesis@data@#1}{%
54     \@nameuse{istaustriathesis@data@#1@error}}%
55 }%

```

`\CreateData` Issues the construction of a setter function for a data entry given by `\setdata`.

```

56 \newcommand{\CreateData}[1]{%
57   \@namedef{set#1}##1{%
58     \istaustriathesis@def@data{#1}{##1}%
59   }%
60   \istaustriathesis@def@data@invalid{#1}{\string\set#1}%
61 }%
```

6.2.3 Persons

`\istaustriathesis@def@person` Creates the internal storage for a person's name, titles and affiliation.

```

62 \newcommand{\istaustriathesis@def@person}[5]{%
63   \@namedef{istaustriathesis@person@#1@def}{}%
64   \@namedef{istaustriathesis@person@#1@pretitle}{#2}%
65   \@namedef{istaustriathesis@person@#1@name}{#3}%
66   \@namedef{istaustriathesis@person@#1@posttitle}{#4}%
67   \@namedef{istaustriathesis@person@#1@affiliation}{#5}%

```

For the full name, additional spaces have to be inserted depending on the presence of pre- or posttitles.

```

68   \ifstrempy{#3}{%
69     \ifstrempy{#2}{%
70       \@namedef{istaustriathesis@person@#1@fullname}{#4}%
71       \@namedef{istaustriathesis@person@#1@fullnameaffiliation}{%
72         #4, #5}%
73     }{%
74       \ifstrempy{#4}{%
75         \@namedef{istaustriathesis@person@#1@fullname}{#2}%
76         \@namedef{istaustriathesis@person@#1@fullnameaffiliation}{%
77           #2, #5}%
78       }{%
79         \@namedef{istaustriathesis@person@#1@fullname}{#2 #4}%
80         \@namedef{istaustriathesis@person@#1@fullnameaffiliation}{%
81           #2 #4, #5}%
82       }%
83     }%
84   }{%
85     \ifstrempy{#2}{%
86       \ifstrempy{#4}{%
87         \@namedef{istaustriathesis@person@#1@fullname}{#3}%
88         \@namedef{istaustriathesis@person@#1@fullnameaffiliation}{%
89           #3, #5}%
90       }{%
91         \@namedef{istaustriathesis@person@#1@fullname}{#3, #4}%
92         \@namedef{istaustriathesis@person@#1@fullnameaffiliation}{%
93           #3, #4, #5}%
94       }%

```

```

95     }{%
96     \ifstrempy{#4}{%
97         \@namedef{istaustriathesis@person@#1@fullname}{#2 #3}%
98         \@namedef{istaustriathesis@person@#1@fullnameaffiliation}{%
99             #2 #3, #5}%
100     }{%
101         \@namedef{istaustriathesis@person@#1@fullname}{#2 #3, #4}%
102         \@namedef{istaustriathesis@person@#1@fullnameaffiliation}{%
103             #2 #3, #4, #5}%
104     }%
105 }%
106 }%
107 }%

```

istaustriathesis@def@person@invalid Initializes the internal storage with error messages.

```

108 \newcommand{\istaustriathesis@def@person@invalid}[2]{%
109     \@namedef{istaustriathesis@person@#1@error}{%
110         \ClassError{istaustriathesis}{No #2 issued}{Set #1 with #2.}%
111     }%
112     \@namedef{istaustriathesis@person@#1@name}{%
113         \@nameuse{istaustriathesis@person@#1@error}}%
114     \@namedef{istaustriathesis@person@#1@prettitle}{%
115         \@nameuse{istaustriathesis@person@#1@error}}%
116     \@namedef{istaustriathesis@person@#1@posttitle}{%
117         \@nameuse{istaustriathesis@person@#1@error}}%
118     \@namedef{istaustriathesis@person@#1@affiliation}{%
119         \@nameuse{istaustriathesis@person@#1@error}}%
120     \@namedef{istaustriathesis@person@#1@fullname}{%
121         \@nameuse{istaustriathesis@person@#1@error}}%
122     \@namedef{istaustriathesis@person@#1@fullnameaffiliation}{%
123         \@nameuse{istaustriathesis@person@#1@error}}%
124 }%

```

\CreatePerson Issues the construction of a setter function for a person given by \setperson.

```

125 \newcommand{\CreatePerson}[1]{%
126     \@namedef{set#1}##1##2##3##4{%
127         \istaustriathesis@def@person{#1}{##1}{##2}{##3}{##4}%
128     }%
129     \istaustriathesis@def@person@invalid{#1}{\string\set#1}%
130 }%

```

6.2.4 Declarations

Textual Data Creates the required textual data entries.

```

131 \CreateData{title}%
132 \CreateData{subtitle}%
133 \CreateData{issn}%

```

134 \CreateData{isbn}%

Persons Creates the required person entries.

135 \CreatePerson{author}%
 136 \CreatePerson{supervisor}%
 137 \CreatePerson{cosupervisor}%
 138 \CreatePerson{committeememberI}%
 139 \CreatePerson{committeememberII}%
 140 \CreatePerson{committeememberIII}%
 141 \CreatePerson{committeememberIIII}%
 142 \CreatePerson{defensechair}%

\istaustriathesis@by Define literals.

\istaustriathesis@submission
 \istaustriathesis@committee
 \istaustriathesis@onfile

143 \newcommand{\istaustriathesis@by}{by}%
 144 \newcommand{\istaustriathesis@submission}{%
 145 \emph{A thesis submitted to the\\Graduate School\\of the\\
 146 Institute of Science and Technology Austria\\
 147 in partial fulfillment of the requirements\\
 148 for the degree of\\Doctor of Philosophy}}%
 149 \newcommand{\istaustriathesis@committee}{Committee in charge:}%
 150 \newcommand{\istaustriathesis@onfile}{Signed page is on file}%

6.2.5 License Types

\istaustriathesis@license@restricted Seven license types are differentiated: restricted and six Creative Commons
 \istaustriathesis@license@ccby variants ccby....

151 \newcommand{\istaustriathesis@license@restricted}{restricted}%
 152 \newcommand{\istaustriathesis@license@ccby}{cc-by}%
 153 \newcommand{\istaustriathesis@license@ccbysa}{cc-by-sa}%
 154 \newcommand{\istaustriathesis@license@ccbynd}{cc-by-nd}%
 155 \newcommand{\istaustriathesis@license@ccbync}{cc-by-nc}%
 156 \newcommand{\istaustriathesis@license@ccbyncsa}{cc-by-nc-sa}%
 157 \newcommand{\istaustriathesis@license@ccbyncnd}{cc-by-nc-nd}%

\istaustriathesis@restricted Define literals.

\istaustriathesis@ccby
 \istaustriathesis@ccbysa
 \istaustriathesis@ccbynd
 \istaustriathesis@ccbync
 \istaustriathesis@ccbyncsa
 \istaustriathesis@ccbyncnd

158 \newcommand{\istaustriathesis@restricted}{All Rights Reserved}%
 159 \newcommand{\istaustriathesis@ccby}{%
 160 CC BY 4.0 The copyright of this thesis rests with the author. %
 161 Unless otherwise indicated, its contents are licensed under a %
 162 \href{https://creativecommons.org/licenses/by/4.0/}{%
 163 Creative Commons Attribution 4.0 International License}. %
 164 Under this license, you may copy and redistribute the material %
 165 in any medium or format. You may also create and distribute modified %
 166 versions of the work. This is on the condition that: you credit the %
 167 author.}%
 168 \newcommand{\istaustriathesis@ccbysa}{%

169 CC BY-SA 4.0 The copyright of this thesis rests with the author. %
 170 Unless otherwise indicated, its contents are licensed under a %
 171 \href{https://creativecommons.org/licenses/by-sa/4.0/}{%
 172 Creative Commons Attribution-ShareAlike 4.0 International}. %
 173 Under this license, you may copy and redistribute the material %
 174 in any medium or format for both commercial and non-commercial %
 175 purposes. You may also create and distribute modified versions %
 176 of the work. This on the condition that: you credit the author %
 177 and share any derivative works under the same license.}%
 178 \newcommand{\istaustriathesis@ccbbynd}{%
 179 CC BY-ND 4.0 The copyright of this thesis rests with the author. %
 180 Unless otherwise indicated, its contents are licensed under a %
 181 \href{https://creativecommons.org/licenses/by-nd/4.0/}{%
 182 Creative Commons Attribution-NoDerivatives 4.0 International License}. %
 183 Under this licence, you may copy and redistribute the material %
 184 in any medium or format for both commercial and non-commercial %
 185 purposes. This on the condition that: you credit the author and %
 186 do not distribute modified versions of the work.}%
 187 \newcommand{\istaustriathesis@ccbync}{%
 188 CC BY-NC 4.0 The copyright of this thesis rests with the author. %
 189 Unless otherwise indicated, its contents are licensed under a %
 190 \href{https://creativecommons.org/licenses/by-nc/4.0/}{%
 191 Creative Commons Attribution-NonCommercial 4.0 International License}. %
 192 Under this license, you may copy and redistribute the material %
 193 in any medium or format. You may also create and distribute %
 194 modified versions of the work. This is on the condition that: %
 195 you credit the author and do not use it, or any derivative %
 196 works, for a commercial purpose.}%
 197 \newcommand{\istaustriathesis@ccbyncsa}{%
 198 CC BY-NC-SA 4.0 The copyright of this thesis rests with the author. %
 199 Unless otherwise indicated, its contents are licensed under a %
 200 \href{https://creativecommons.org/licenses/by-nc-sa/4.0/}{%
 201 Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License}. %
 202 Under this license, you may copy and redistribute the material %
 203 in any medium or format. You may also create and distribute %
 204 modified versions of the work. This is on the condition that: %
 205 you credit the author, do not use it for commercial purposes %
 206 and share any derivative works under the same license.}%
 207 \newcommand{\istaustriathesis@ccbyncnd}{%
 208 CC BY-NC-ND 4.0 The copyright of this thesis rests with the author. %
 209 Unless otherwise indicated, its contents are licensed under a %
 210 \href{https://creativecommons.org/licenses/by-nc-nd/4.0/}{%
 211 Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License}. %
 212 Under this license, you may copy and redistribute the material %
 213 in any medium or format. This is on the condition that: you %
 214 credit the author, do not use it for commercial purposes and do %
 215 not distribute modified versions of the work.}%

`\istaustriathesis@license`

```
216 \newcommand{\istaustriathesis@license}{  
217   \ClassError{istaustriathesis}{No license chosen}{Set license type with \string\setlicense.}%  
218 }%
```

`\setlicense` Sets the copyright license.

```
219 \newcommand{\setlicense}[1]{  
220   \ifdefstring{\istaustriathesis@license@restricted}{#1}{%  
221     \renewcommand{\istaustriathesis@license}{%  
222       \istaustriathesis@restricted}%  
223   }{}%  
224   \ifdefstring{\istaustriathesis@license@ccby}{#1}{%  
225     \renewcommand{\istaustriathesis@license}{%  
226       \istaustriathesis@ccby}%  
227   }{}%  
228   \ifdefstring{\istaustriathesis@license@ccbysa}{#1}{%  
229     \renewcommand{\istaustriathesis@license}{%  
230       \istaustriathesis@ccbysa}%  
231   }{}%  
232   \ifdefstring{\istaustriathesis@license@ccbynd}{#1}{%  
233     \renewcommand{\istaustriathesis@license}{%  
234       \istaustriathesis@ccbynd}%  
235   }{}%  
236   \ifdefstring{\istaustriathesis@license@ccbync}{#1}{%  
237     \renewcommand{\istaustriathesis@license}{%  
238       \istaustriathesis@ccbync}%  
239   }{}%  
240   \ifdefstring{\istaustriathesis@license@ccbyncsa}{#1}{%  
241     \renewcommand{\istaustriathesis@license}{%  
242       \istaustriathesis@ccbyncsa}%  
243   }{}%  
244   \ifdefstring{\istaustriathesis@license@ccbyncnd}{#1}{%  
245     \renewcommand{\istaustriathesis@license}{%  
246       \istaustriathesis@ccbyncnd}%  
247   }{}%  
248 }%
```

6.3 Layout

6.3.1 Setup

`\newsetlength` Set internal convenience macros.

```
249 \newcommand{\newsetlength}[2]{%  
250   \newlength{#1}%  
251   \setlength{#1}{#2}%  
252 }%
```

```

\istaustriathesis@skip Set style element specifications.
\istaustriathesis@medskip
\istaustriathesis@bigskip
253 \newsetlength{\istaustriathesis@skipamount}{1ex}%
254 \newsetlength{\istaustriathesis@medskipamount}{3ex}%
255 \newsetlength{\istaustriathesis@bigskipamount}{6ex}%

Helper functions.

256 \newcommand{\istaustriathesis@skip}{%
257   \vspace*{\istaustriathesis@skipamount}}%
258 \newcommand{\istaustriathesis@medskip}{%
259   \vspace*{\istaustriathesis@medskipamount}}%
260 \newcommand{\istaustriathesis@bigskip}{%
261   \vspace*{\istaustriathesis@bigskipamount}}%

6.3.2 Title Page

\istaustriathesis@pagestyle@titlepage Generate the title page style.

262 \copypagestyle{\istaustriathesis@pagestyle@titlepage}{empty}%

\CommitteeSummaryBlock

263 \newcommand{\CommitteeSummaryBlock}{%
264   \istaustriathesis@committee
265   \istaustriathesis@skip
266   \\\istaustriathesis@person@defensechair@name, Chair
267   \\\istaustriathesis@person@supervisor@name
268   \ifdef{\istaustriathesis@person@cosupervisor@def}{%
269     \\\istaustriathesis@person@cosupervisor@name
270   }{}%
271   \\\istaustriathesis@person@committeememberI@name
272   \\\istaustriathesis@person@committeememberII@name
273   \ifdef{\istaustriathesis@person@committeememberIII@def}{%
274     \\\istaustriathesis@person@committeememberIII@name
275   }{}%
276   \ifdef{\istaustriathesis@person@committeememberIV@def}{%
277     \\\istaustriathesis@person@committeememberIV@name
278   }{}%
279 }%

\istaustriathesis@graphics@logo Define logo.

280 \newcommand{\istaustriathesis@graphics@logo}{%
281   \includegraphics[width=5cm]{ISTA_Logo_4c_cmyk.pdf}}%

\AddTitlePage Generates the title page. Multiline title and subtitle are supported.

282 \newcommand{\AddTitlePage}{%
283   \thispagestyle{\istaustriathesis@pagestyle@titlepage}%

```

```

284 \beginngroup\centering
285 \null\vfill
286 {\istaustriathesis@Huge\bfseries\istaustriathesis@data@title\par}
287 {\istaustriathesis@LARGE\bfseries
288   \ifdef{\istaustriathesis@data@subtitle}{%
289     \istaustriathesis@data@subtitle}{%
290   }%
291 \par}
292 \istaustriathesis@skip
293 {\istaustriathesis@large\istaustriathesis@by\par}
294 \istaustriathesis@skip
295 {\istaustriathesis@Large
296   \bfseries\istaustriathesis@person@author@fullname\par}
297 \istaustriathesis@skip
298 {\istaustriathesis@large
299   \DTMmonthname{\DTMfetchmonth{\istaustriathesis@date@signing}}, %
300   \DTMfetchyear{\istaustriathesis@date@signing}%
301 \par}
302 \vfill
303 {\istaustriathesis@large\istaustriathesis@submission\par}
304 \istaustriathesis@bigskip
305 {\istaustriathesis@large\CommitteeSummaryBlock\par}
306 \istaustriathesis@bigskip
307 \istaustriathesis@graphics@logo\par
308 \endgroup
309 \cleardoublepage
310 }%

```

6.3.3 Committee Page

athesis@pagestyle@committeepage Generate the committee page style.

```

311 \coppypagestyle{\istaustriathesis@pagestyle@committeepage}{empty}%

```

\ApprovalBlock

```

312 \newcommand{\ApprovalBlock}{%
313   The thesis of \istaustriathesis@person@author@name, %
314   titled \emph{\istaustriathesis@data@title}, is approved by:%
315 }%

```

\SignatureBlock

```

316 \newcommand{\SignatureBlock}[2]{%
317   {\bfseries #1}: #2\par
318   \beginngroup\centering
319     \istaustriathesis@bigskip
320     Signature: \rule{8cm}{0.4pt}\par
321   \endgroup
322 }%

```


\CommitteeBlock

```

323 \newcommand{\CommitteeBlock}{%
324   \SignatureBlock{Supervisor}{%
325     \istaustriathesis@person@supervisor@fullnameaffiliation}\par
326   \istaustriathesis@medskip
327   \ifdef{\istaustriathesis@person@cosupervisor@def}{%
328     \SignatureBlock{Co-supervisor}{%
329       \istaustriathesis@person@cosupervisor@fullnameaffiliation}\par
330     \istaustriathesis@medskip
331   }{%
332     \SignatureBlock{Committee Member}{%
333       \istaustriathesis@person@committeememberI@fullnameaffiliation}\par
334     \istaustriathesis@medskip
335     \SignatureBlock{Committee Member}{%
336       \istaustriathesis@person@committeememberII@fullnameaffiliation}\par
337     \istaustriathesis@medskip
338     \ifdef{\istaustriathesis@person@committeememberIII@def}{%
339       \SignatureBlock{Committee Member}{%
340         \istaustriathesis@person@committeememberIII@fullnameaffiliation}\par
341       \istaustriathesis@medskip
342     }{%
343       \ifdef{\istaustriathesis@person@committeememberIIII@def}{%
344         \SignatureBlock{Committee Member}{%
345           \istaustriathesis@person@committeememberIIII@fullnameaffiliation}\par
346         \istaustriathesis@medskip
347       }{%
348         \SignatureBlock{Defense Chair}{%
349           \istaustriathesis@person@defensechair@fullnameaffiliation}\par
350       }%

```

\AddCommitteePage Generates the committee page with signature fields.

```

351 \newcommand{\AddCommitteePage}{%
352   \thispagestyle{\istaustriathesis@pagestyle@committeepage}%
353   \ApprovalBlock\par
354   \vfill
355   \CommitteeBlock\par
356   \istaustriathesis@medskip
357   \begingroup\centering
358   {\istaustriathesis@small\istaustriathesis@onfile\par}
359   \endgroup
360   \cleardoublepage
361 }%

```

6.3.4 Statement Page

\istaustriathesis@pagestyle@statementpage Generate the statement page style.

```

362 \copypagestyle{\istaustriathesis@pagestyle@statementpage}{empty}%

```

\CopyrightBlock

```
363 \newcommand{\CopyrightBlock}{%
364   \begingroup\centering
365   \textcopyright\ by \istaustriathesis@person@author@name, %
366   \DTMmonthname{\DTMfetchmonth{\istaustriathesis@date@signing}}, %
367   \DTMfetchyear{\istaustriathesis@date@signing}\\
368   \endgroup
369   \begingroup
370     \setlength{\parindent}{0pt}%
371     \setlength{\leftskip}{0pt plus 0.5fil}%
372     \setlength{\rightskip}{0pt plus -0.5fil}%
373     \istaustriathesis@license%
374     \par
375   \endgroup
376 }%
```

\ISSNBlock

```
377 \newcommand{\ISSNBlock}{%
378   IST Austria Thesis%
379   \ifdef{\istaustriathesis@data@issn@def}{%
380     , ISSN: \istaustriathesis@data@issn
381   }\par
382 }%
```

\ISBNBlock

```
383 \newcommand{\ISBNBlock}{%
384   \ifdef{\istaustriathesis@data@isbn@def}{%
385     \istaustriathesis@medskip
386     ISBN: \istaustriathesis@data@isbn\par
387   }\par
388 }%
```

\StatementBlock

```
389 \newcommand{\StatementBlock}{%
390   \noindent I hereby declare that this thesis is my own work and that %
391   it does not contain other people's work without this being so %
392   stated; this thesis does not contain my previous work without this %
393   being stated, and the bibliography contains all the literature that %
394   I used in writing the dissertation.\par
395   \istaustriathesis@medskip
396   \noindent I declare that this is a true copy of my thesis, including %
397   any final revisions, as approved by my thesis committee, and that %
398   this thesis has not been submitted for a higher degree to any other %
399   university or institution.\par
400   \istaustriathesis@medskip
401   \noindent I certify that any republication of materials presented in %
```

```

402   this thesis has been approved by the relevant publishers and %
403   co-authors.%
404 }%

```

\AddStatementPage Generates the statement and copyright page with signature field.

```

405 \newcommand{\AddStatementPage}{%
406   \thispagestyle{istaustriathesis@pagestyle@statementpage}%
407   \CopyrightBlock\par
408   \istaustriathesis@bigskip
409   \begin{group}\centering
410     \ISSNBlock
411     \ISBNBlock
412   \end{group}
413   \istaustriathesis@bigskip
414   \StatementBlock\par
415   \istaustriathesis@bigskip
416   \begin{group}\centering
417     Signature: \rule{6cm}{0.4pt}\par
418   \istaustriathesis@skip
419   \istaustriathesis@person@author@name\\
420   \DTMmonthname{\DTMfetchmonth{istaustriathesis@date@signing}}, %
421   \DTMfetchyear{istaustriathesis@date@signing}\par
422   \vfill
423   {\istaustriathesis@small\istaustriathesis@onfile\par}
424   \end{group}
425   \cleardoublepage
426 }%

```

6.3.5 Front Matter Material

\addtitlepage Generates the titlepage.

```

427 \newcommand{\addtitlepage}{%
428   \AddTitlePage}%

```

\addcommitteepage Generates the committee page.

```

429 \newcommand{\addcommitteepage}{%
430   \AddCommitteePage}%

```

\addstatementpage Generates the statemet page.

```

431 \newcommand{\addstatementpage}{%
432   \AddStatementPage}%

```

abstract Generates the abstract page.

```

433 \renewenvironment{abstract}{%
434   \chapter{Abstract}%

```

435 }{}%

acknowledgements Generates the acknowledgements page.

```
436 \newenvironment{acknowledgements}{%
437   \openany% Start on next page
438   \chapter{Acknowledgements}%
439 }{%
440   \openright% Reactivate standard behavior
441 }%
```

aboutauthor Generates the about the author page.

```
442 \newenvironment{aboutauthor}{%
443   \openany% Start on next page
444   \chapter{About the Author}%
445 }{%
446   \openright% Reactivate standard behavior
447 }%
```

publicationlist Generates the list of publications page.

```
448 \newenvironment{publicationlist}{%
449   \openany% Start on next page
450   \chapter{List of Collaborators and Publications}%
451 }{%
452   \openright% Reactivate standard behavior
453 }%
```

7 Change History

v0.1		Creative Commons licenses	
General: Pre-release version	1	and improve ISBN handling	19
v1.0		\CopyrightBlock: Enable Creative	
General: Release version	1	Commons licenses	18
publicationlist: Updated		\ISBNBlock: Improve ISBN	
caption heading of publication		handling	18
list.	20	\ISSNBlock: Improve ISBN	
v1.1		handling	18
\AddCommitteePage: Corrected		\istaustriathesis@ccbyncnd:	
line spacing	17	Enable Creative Commons	
\AddStatementPage: Corrected		licenses	12
line spacing	19	\istaustriathesis@license:	
\AddTitlePage: Corrected line		Enable Creative Commons	
spacing	15	licenses	13
General: Corrected line spacing	1	\istaustriathesis@license@ccbyncnd:	
v1.2		Enable Creative Commons	
\AddStatementPage: Enable		licenses	12

<code>\setlicense:</code> Enable Creative Commons licenses	handling	11
General: Enable Creative Commons licenses and improve ISBN handling	<code>\istaustriathesis@graphics@logo:</code> Switched to ISTA logo	15
General: Switch to new corporate design		1

Index

Symbols

<code>\@namedef</code>	46, 47, 50, 53, 57, 63, 64, 65, 66, 67, 70, 71, 75, 76, 79, 80, 87, 88, 91, 92, 97, 98, 101, 102, 109, 112, 114, 116, 118, 120, 122, 126
<code>\@nameuse</code>	54, 113, 115, 117, 119, 121, 123
<code>\</code>	145, 146, 147, 148, 266, 267, 269, 271, 272, 274, 277, 367, 419
<code>_</code>	365

A

<code>aboutauthor</code> (environment)	5, 442
<code>aboutauthor*</code> (environment)	5
<code>abstract</code> (environment)	5, 433
<code>abstract*</code> (environment)	5
<code>acknowledgements</code> (environment)	5, 436
<code>acknowledgements*</code> (environment)	5
<code>\AddCommitteePage</code>	7, 351, 430
<code>\addcommitteepage</code>	429
<code>\AddStatementPage</code>	7, 405, 432
<code>\addstatementpage</code>	5, 431
<code>\AddTitlePage</code>	7, 282, 428
<code>\addtitlepage</code>	5, 427
<code>\ApprovalBlock</code>	7, 312, 353

B

<code>\begingroup</code>	32, 284, 318, 357, 364, 369, 409, 416
<code>\bfseries</code>	286, 287, 296, 317

C

<code>\centering</code>	284, 318, 357, 364, 409, 416
<code>\chapter</code>	434, 438, 444, 450
<code>\chapterstyle</code>	6
<code>\checkandfixthelayout</code>	20
<code>\ClassError</code>	51, 110, 217
<code>\cleardoublepage</code>	309, 360, 425
<code>\CommitteeBlock</code>	7, 323, 355
<code>\committeepage</code>	5
<code>\CommitteeSummaryBlock</code>	7, 263, 305

\copypagestyle	262, 311, 362
\CopyrightBlock	7, <u>363</u> , 407
\CreateData	6, <u>56</u> , 131, 132, <u>133</u> , 134
\CreatePerson	6, <u>125</u> , 135, 136, 137, 138, 139, 140, 141, 142
Creative Commons	5
\CurrentOption	2

D

\DeclareOption	1
\DTMfetchmonth	299, 366, 420
\DTMfetchyear	300, 367, 421
\DTMmonthname	299, 366, 420
\DTMsavenoparsedate	43

E

\emph	145, 314
\endgroup	35, 308, 321, 359, 368, 375, 412, 424
environments:	
aboutauthor	5, <u>442</u>
aboutauthor*	5
abstract	5, <u>433</u>
abstract*	5
acknowledgements	5, <u>436</u>
acknowledgements*	5
publicationlist	5, <u>448</u>
publicationlist*	5
SFFont	7, <u>31</u>

F

\f@family	34, 37
\footnotesize	28

G

\global	34
\graphicspath	17

H

\href	162, 171, 181, 190, 200, 210
\Huge	21
\huge	22

I

\ifdef	268, 273, 276, 288, 327, 338, 343, 379, 384
\ifdefstrequal	37
\ifdefstring	220, 224, 228, 232, 236, 240, 244
\ifstrempty	68, 69, 74, 85, 86, 96
\includegraphics	281

\ISBNBlock	7, 383, 411
\ISSNBlock	7, 377, 410
\istaustriathesis@bigskip	253, 304, 306, 319, 408, 413, 415
\istaustriathesis@bigskipamount	255, 261
\istaustriathesis@by	143, 293
\istaustriathesis@ccby	158, 226
\istaustriathesis@ccbync	158, 238
\istaustriathesis@ccbyncnd	158, 246
\istaustriathesis@ccbyncsa	158, 242
\istaustriathesis@ccbynd	158, 234
\istaustriathesis@ccbysa	158, 230
\istaustriathesis@committee	143, 264
\istaustriathesis@data@isbn	386
\istaustriathesis@data@isbn@def	384
\istaustriathesis@data@issn	380
\istaustriathesis@data@issn@def	379
\istaustriathesis@data@subtitle	288, 289
\istaustriathesis@data@title	286, 314
\istaustriathesis@def@data	45, 58
\istaustriathesis@def@data@invalid	49, 60
\istaustriathesis@def@person	62, 127
\istaustriathesis@def@person@invalid	108, 129
\istaustriathesis@f@family@tmp	34, 37, 40
\istaustriathesis@footnotesize	21
\istaustriathesis@graphics@logo	280, 307
\istaustriathesis@HUGE	21
\istaustriathesis@Huge	21, 286
\istaustriathesis@huge	21
\istaustriathesis@LARGE	21, 287
\istaustriathesis@Large	21, 295
\istaustriathesis@large	21, 293, 298, 303, 305
\istaustriathesis@license	216, 221, 225, 229, 233, 237, 241, 245, 373
\istaustriathesis@license@ccby	151, 224
\istaustriathesis@license@ccbync	151, 236
\istaustriathesis@license@ccbyncnd	151, 244
\istaustriathesis@license@ccbyncsa	151, 240
\istaustriathesis@license@ccbynd	151, 232
\istaustriathesis@license@ccbysa	151, 228
\istaustriathesis@license@restricted	151, 220
\istaustriathesis@medskip	253, 326, 330, 334, 337, 341, 346, 356, 385, 395,
400	
\istaustriathesis@medskipamount	254, 259
\istaustriathesis@normalsize	21
\istaustriathesis@onfile	143, 358, 423
\istaustriathesis@pagestyle@committeepage	311
\istaustriathesis@pagestyle@statementpage	362

\istaustriathesis@pagestyle@titlepage	262
\istaustriathesis@person@author@fullname	296
\istaustriathesis@person@author@name	313, 365, 419
\istaustriathesis@person@committeememberI@fullnameaffiliation ..	333
\istaustriathesis@person@committeememberI@name	271
\istaustriathesis@person@committeememberII@fullnameaffiliation .	336
\istaustriathesis@person@committeememberII@name	272
\istaustriathesis@person@committeememberIII@def	273, 338
\istaustriathesis@person@committeememberIII@fullnameaffiliation	340
\istaustriathesis@person@committeememberIII@name	274
\istaustriathesis@person@committeememberIII@def	276, 343
\istaustriathesis@person@committeememberIII@fullnameaffiliation ..	345
\istaustriathesis@person@committeememberIII@name	277
\istaustriathesis@person@cosupervisor@def	268, 327
\istaustriathesis@person@cosupervisor@fullnameaffiliation	329
\istaustriathesis@person@cosupervisor@name	269
\istaustriathesis@person@defensechair@fullnameaffiliation	349
\istaustriathesis@person@defensechair@name	266
\istaustriathesis@person@supervisor@fullnameaffiliation	325
\istaustriathesis@person@supervisor@name	267
\istaustriathesis@restricted	158, 222
\istaustriathesis@scriptsize	21
\istaustriathesis@skip	253, 265, 292, 294, 297, 418
\istaustriathesis@skipamount	253, 257
\istaustriathesis@small	21, 358, 423
\istaustriathesis@submission	143, 303
\istaustriathesis@tiny	21

L

\LARGE	23
\Large	24
\large	25
\leftskip	371
\let	34
\LoadClass	5

N

\newcommand	21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 42, 45, 49, 56, 62, 108, 125, 143, 144, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 168, 178, 187, 197, 207, 216, 219, 249, 256, 258, 260, 263, 280, 282, 312, 316, 323, 351, 363, 377, 383, 389, 405, 427, 429, 431
\newenvironment	31, 436, 442, 448
\newlength	250
\newsetlength	249, 253, 254, 255
\noindent	390, 396, 401

<code>\normalsize</code>	26
<code>\null</code>	285

O

<code>\openany</code>	437, 443, 449
<code>\openright</code>	440, 446, 452

P

<code>\par</code> .	286, 291, 293, 296, 301, 303, 305, 307, 317, 320, 325, 329, 333, 336, 340, 345, 349, 353, 355, 358, 374, 381, 386, 394, 399, 407, 414, 417, 421, 423
<code>\parindent</code>	370
<code>\PassOptionsToClass</code>	2
<code>\Persons</code>	135
<code>\ProcessOptions</code>	4
<code>publicationlist</code> (environment)	5, 448
<code>publicationlist*</code> (environment)	5

R

<code>\relax</code>	4
<code>\renewcommand</code>	36, 40, 221, 225, 229, 233, 237, 241, 245
<code>\renewenvironment</code>	433
<code>\RequirePackage</code>	7, 8, 9, 10, 11, 12, 13, 14, 15, 16
<code>\rightskip</code>	372
<code>\rule</code>	320, 417

S

<code>\scriptsize</code>	29
<code>\set</code>	60, 129
<code>\setauthor</code>	4
<code>\setcommitteememberI</code>	4
<code>\setcommitteememberII</code>	4
<code>\setcommitteememberIII</code>	4
<code>\setcommitteememberIIII</code>	4
<code>\setcopyright</code>	4
<code>\setcosupervisor</code>	4
<code>\setdate</code>	4, 42
<code>\setdefensechair</code>	4
<code>\setisbn</code>	3
<code>\setissn</code>	3
<code>\setlength</code>	251, 370, 371, 372
<code>\setlicense</code>	217, 219
<code>\setlrmarginsandblock</code>	18
<code>\setsubtitle</code>	3
<code>\setsupervisor</code>	4
<code>\settitle</code>	3
<code>\setulmarginsandblock</code>	19

<code>\sfdefault</code>	36, 40
<code>\sffamily</code>	33, 38
<code>SFFont</code> (environment)	7, <u>31</u>
<code>\SignatureBlock</code>	7, <u>316</u> , 324, 328, 332, 335, 339, 344, 348
<code>\small</code>	27
<code>\StatementBlock</code>	7, <u>389</u> , 414
<code>\string</code>	60, 129, 217

T

<code>\textcopyright</code>	365
<code>\TextualData</code>	<u>131</u>
<code>\thispagestyle</code>	283, 352, 406
<code>\tiny</code>	30

V

<code>\vfill</code>	285, 302, 354, 422
<code>\vspace</code>	257, 259, 261