

The dithesis class *

Manolis Paissios Paschalis Antoniou
e.paissios@di.uoa.gr p.antoniou@di.uoa.gr

Kostantinos Koukopoulos
kouk@noc.uoa.gr

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Abstract

This is the unofficial L^AT_EX class file for undergraduate theses that conform to the specifications of the Library of the Department of Informatics at the University of Athens..

1 Introduction

This document class will mainly be helpful to the students of the Department of Informatics ¹ of the University of Athens, who wish to write their undergraduate thesis in L^AT_EX 2_ε while conforming to the mandatory guidelines of the department's library.

1.1 Acknowledgements

As a starting point for the creation of this document class, the `suthesis-2e.sty` ² package from Stanford University was used. It was originally written by Joseph Pallas in 1989 and heavily modified by Emma Pease thereafter. Please refer to the `suthesis-2e.sty` file for the full credits.

1.2 Description

This class builds upon the standard report style to follow the guidelines of the Department of Informatics Library. Among other things it sets the correct margins and interline spacing.

1.2.1 Basic Usage

`\documentclass` In order to use this document class you must first write the following in your document:

```
\documentclass[<args>]{dithesis}
```

*This document corresponds to dithesis 2.19, dated 2001/01/27.

¹<http://www.di.uoa.gr>

²<http://help-csli.stanford.edu/tex/suthesis/>

The *<args>* are optional and are passed on to the **report** document class, on which this class is based.

Due to the fact that this class is based on **report** one should use the commands `\title` and `\author` just as one would when using the **report** document class.

`\studno` The `\studcode` is the code that identifies the author to the administration of the university. Usually a number, like at the University of Athens.

```
\studcode{<code>}
```

`\advisor` The `\advisor` is the name of the faculty member who advised the author during the authoring of the thesis.

```
\advisor{<name>}
```

`\grkabstrac` The `\grkabstrac` is the the greek language abstract.

```
\grkabstrac{<text>}
```

`\engabstract` The `\engabstract` is the the english language abstract.

```
\engabstract{<text>}
```

1.2.2 Example usage

```
\documentclass[twoside,12pt]{dithesis}
\usepackage[english,greek]{babel}

\begin{document}
\title{Titlos}
\author{Gi'orgos Papad'opoulos}
\studcode{123456}
\advisor{Dhm'htrhc Qristodo'ulou}
\grkabstrac{Ant'i Prol'ogou}
\engabstract{\textlatin{some kind of abstract}}
\maketitle

\chapter{Eisagwg'h}

mpl'a mpl'a mpla m'pla

\end{document}
```

1.2.3 Optional Front Page Parameters

The following commands let you configure the various academic titles and names that will appear on the title page. By default these parameters are well suited for theses written for the Department of Informatics at the University of Athens:

`\universityname` The name of the university:

```
\universityname{<name>}
```

`\universityschool` The `\universityschool` is the name of specific school of the University that the thesis is being presented to.

	<code>\universityschool{<i>name</i>}</code>
<code>\universitydept</code>	The <code>\universitydept</code> is the name of the specific department of the university that the thesis is being presented to.
	<code>\universityschool{<i>name</i>}</code>
<code>\thesistype</code>	The <code>\thesistype</code> is a description of the kind of thesis you are writing. For example it could be “Final year project” or “Doctoral dissertation”.
	<code>\thesistype{<i>type</i>}</code>
<code>\submitdate</code>	The <code>\submitdate</code> is the date that the thesis was submitted to the library. The default for the date is the month and the year.
	<code>\submitdate{<i>date</i>}</code>
<code>\place</code>	The <code>\place</code> is the place that will appear along with <code>\submitdate</code> .
	<code>\place{<i>place</i>}</code>
<code>\greeksubjarea</code>	The <code>\greeksubjarea</code> is the greeksubjarea that will appear along with <code>\submitdate</code> .
	<code>\greeksubjarea{<i>greeksubjarea</i>}</code>
<code>\englishsubjarea</code>	The <code>\englishsubjarea</code> is the englishsubjarea that will appear along with <code>\submitdate</code> .
	<code>\englishsubjarea{<i>englishsubjarea</i>}</code>
<code>\greekkeywords</code>	The <code>\greekkeywords</code> is the greekkeywords that will appear along with <code>\submitdate</code> .
	<code>\greekkeywords{<i>greekkeywords</i>}</code>
<code>\englishkeywords</code>	The <code>\englishkeywords</code> is the englishkeywords that will appear along with <code>\submitdate</code> .
	<code>\englishkeywords{<i>englishkeywords</i>}</code>

2 Implementation

This document class can only be used with L^AT_EX 2_ε, so the following line makes sure that the user is aware of this:

```
1 <class>\NeedsTeXFormat{LaTeX2e}[1999/12/01]
```

Here we announce the document class ‘dithesis’ and its version

```
2 <class>\ProvidesClass{dithesis}
```

```
3 <class> [2005/10/01 v0.1 di.uoa.gr thesis class]
```

Also we will need the `ifthen` package:

```
4 \RequirePackage{ifthen}
```

2.1 Class Options

The library requires A4 paper:

```
5 \PassOptionsToClass{a4paper}{report}
```

Any other options are passed on to the report class on which this document class is based.

```
6 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{report}}
```

Next we process the options

```
7 \ProcessOptions
```

and load the report document class

```
8 \LoadClass{report}
```

3 Document Layout

3.1 Page Layout

3.1.1 Vertical Spacing

`\footskip` The distance from the baseline of the box which contains the running footer to the baseline of last line of text is controlled by `\footskip`.

```
9 \setlength\footskip{12.5mm}
```

`\parskip` `\parskip` is the vertical space between paragraphs.

```
10 \addtolength{\parskip}{\baselineskip}
```

We require the `setspace` package to set the intra-line spacing:

```
11 \RequirePackage{setspace}
```

```
12 \onehalfspacing
```

3.1.2 Text Dimensions

`\textwidth` Text width is set to 156mm.

```
13 \setlength\textwidth{165mm}
```

`\textheight` The `\textheight` is the height of text (including footnotes and figures, excluding running head and foot).

```
14 \setlength\textheight{222mm}
```

3.1.3 Margins

`\oddsidemargin` `\evensidemargin` Theses may be either single or double sided. Margins are specified by the library.

```
15 \if@twoside
16   \setlength\oddsidemargin {25mm}
17   \setlength\evensidemargin {20mm}
18 \else
19   \setlength\oddsidemargin {2.5cm}
20   \setlength\evensidemargin {2.5cm}
21 \fi
```

```

\marginparwidth Why is this zero? ASK PASXALI
\marginparsep 22 \setlength\marginparwidth {0cm}
                23 \setlength\marginparsep{0cm}

\topmargin The \topmargin is the distance between the top of ‘the printable area’ –which
            is 1 inch below the top of the paper– and the top of the box which contains the
            running head.
            24 \setlength\topmargin {20mm}

            I don’t know what these do
            25 \setlength\hoffset {-1in}
            26 \setlength\voffset {-1in}
            27 \setlength\headheight {12.5mm}
            28 \setlength\headsep {10mm}

```

3.2 Captions

We use the `caption` package to make the captions pretty

```

29 \PassOptionsToPackage{margin=10pt,
30     font={footnotesize},
31     labelfont=bf,
32     aboveskip=10pt,
33     belowskip=0pt}{caption}
34 \RequirePackage{caption}
35 \captionsetup[table]{aboveskip=10pt,belowskip=10pt}

```

3.3 Fancy Headers

We use the `fancyheaders` package to get pretty headers.

```

36 \RequirePackage{fancyhdr}
37 \pagestyle{fancy}

with this we ensure that the chapter and section headings are in lowercase.
38 \renewcommand{\chaptermark}[1]{\markboth{#1}{}}
39 \renewcommand{\sectionmark}[1]{\markright{\thesection\ #1}}

delete current setting for header and footer:
40 \fancyhf{}
41 \fancyhead[CE]{\footnotesize{\@title}}
42 \fancyhead[CO]{\footnotesize{\@title}}
43 \fancyfoot[LO,RE]{\@author}
44 \fancyfoot[LE,RO]{\thepage}
45 \renewcommand{\headrulewidth}{0.5pt}
46 \renewcommand{\footrulewidth}{0.5pt}

get rid of headers on plain pages
47 \fancypagestyle{plain}{%
48     \fancyhead{}
49     \renewcommand{\headrulewidth}{0pt} % and the line
50 }

```

3.4 Required commands

Before we define any commands we must include the babel package to have greek support:

```
51 \usepackage[american,greek]{babel}
```

```
\studcode
\advisor 52 \newcommand{\studcode}[1]{\gdef\@studcode{#1}}
\grkabstract 53 \newcommand{\advisor}[1]{\gdef\@advisor{#1}}
\engabstract 54 \newcommand{\grkabstract}[1]{\gdef\@grkabstract{#1}}
55 \newcommand{\engabstract}[1]{\gdef\@engabstract{#1}}
```

3.5 Configuration Commands

`\universityname` Here we declare commands to permit the user to specify these common academic attributes:
`\universityschool`

```
\universitydept 56 \newcommand{\universityname}[1]{\gdef\@uni{#1}}
\thesistype 57 \newcommand{\universityschool}[1]{\gdef\@school{#1}}
\submitdate 58 \newcommand{\universitydept}[1]{\gdef\@dept{#1}}
\place 59 \newcommand{\thesistype}[1]{\gdef\@type{#1}}
\greeksubjarea 60 \newcommand{\submitdate}[1]{\gdef\@submitdate{#1}}
\englishsubjarea 61 \newcommand{\place}[1]{\gdef\@place{#1}}
\greekkeywords 62 \newcommand{\greeksubjarea}[1]{\gdef\@greeksubjarea{#1}}
\englishkeywords 63 \newcommand{\englishsubjarea}[1]{\gdef\@englishsubjarea{#1}}
64 \newcommand{\greekkeywords}[1]{\gdef\@greekkeywords{#1}}
65 \newcommand{\englishkeywords}[1]{\gdef\@englishkeywords{#1}}
```

and their default values:

```
66 \newcommand{\@uni}{Panepist'hmio Ajhnwn}
67 \newcommand{\@school}{Sql'h Jetik'wn Episthm'wn}
68 \newcommand{\@dept}{Tm'hma Plhroforik'hc kai Thlepikoinwnei'wn}
69 \newcommand{\@type}{Ptuqiak'h Ergas'ia}
70 \newcommand{\@submitdate}{\ifcase\the\month\or
71 Ianou'arioc\or Febrou'arioc\or M'artioc\or Apr'ilioc\or Ma'ioc\or
72 Io'unioic\or Io'ulioic\or A'ugoustoc\or Sept'embrioc\or Okt'wbrioc\or
73 No'embrioc\or Dek'embrioc\fi
74 \space \number\the\year}
75 \newcommand{\@place}{Aj'hna}
76 \newcommand{\@greeksubjarea}{}
77 \newcommand{\@englishsubjarea}{}
78 \newcommand{\@greekkeywords}{}
79 \newcommand{\@englishkeywords}{}

```

3.6 Special Pages

`\titlep` Here is where we implement the title page. To include a university logo on the titlepage we need the `graphicx` package:

```
80 \RequirePackage{graphicx}
```

The command `\titlep` is used in `\maketitle` to create the required title page.

```
81 \newcommand{\titlep}{%
82 \thispagestyle{empty}}
```

Next we include the university logo in the upper left corner and the administrative names next to it (in small caps):

```

83 \begin{minipage}[c]{0.2\textwidth}
84 \begin{flushleft}
85 \includegraphics[scale=0.13]{universitylogo}
86 \end{flushleft}
87 \end{minipage}
88 \begin{minipage}[c]{0.85 \textwidth}
89 \begin{flushleft}\textsc{%
90 \uni\\
91 \school\\
92 \dept }%
93 \end{flushleft}
94 \end{minipage}

```

In the center of the page goes the title of the thesis:

```

95 \vfill
96 \begin{center}
97 \large{\textsc{\@type}}\
98 \vfill
99 \expandafter{\@title}
100 \end{center}
101 \vfill

```

And last we have the author, the advisor, the place and the date centered:

```

102 \begin{center}
103 \@author\\
104 A.M. \@studcode \\
105 \bigskip
106 Epibl'epwn Kajhght'hc: \@advisor\\
107 \bigskip
108 \textsc{\@place} \\
109 \@submitdate\\
110 \end{center}
111 \hbox{}%
112 \newpage
113 }%

```

`\signaturepage` Here we implement the page where the supervisor puts his signature.

```

114 \newcommand{\signaturepage}{%
115 \thispagestyle{empty}%
116 \begin{center}
117 \textbf{\scshape Ptuqiak'h Ergas'ia}}\ \bigskip
118 \@title\ \bigskip
119 \textbf{\@author}}\
120 A.M. \@studcode \\
121 \bigskip
122 \flushleft{\scshape Epibl'epwn}
123 \center{\@advisor}
124 \end{center}
125 \hbox{}%
126 \newpage
127 }%

```

`\grkabstractpage` Here we implement the greek abstract page.

```

128 \newcommand{\grkabstractpage}{%
129 \thispagestyle{empty}%
130 \begin{center}
131   \textbf{\scshape Pr'ologoc}
132 \end{center}
133 \@grkabstract\vfill{}
134 \begin{tabular}{ll}
135   \textsc{Jematik'h Perioq'h:} & {\@greeksubjarea}\\
136   \textsc{L'exeic Kleidi'a:} & {\@greekkeywords}
137 \end{tabular}
138 \hbox{}%
139 \newpage
140 }%

```

`\engabstractpage` Here we implement the english abstract page.

```

141 \newcommand{\engabstractpage}{%
142 \thispagestyle{empty}%
143 \begin{center}
144   \textsc{\textlatin{Abstract}}
145 \end{center}
146 \@engabstract\vfill{}
147 \begin{tabular}{ll}
148   \textsc{\textlatin{Subject Area:}} & {\@englishsubjarea}\\
149   \textsc{\textlatin{Keywords:}} & {\@englishkeywords}
150 \end{tabular}
151 \hbox{}%
152 \newpage
153 }%

```

`\maketitle` Finally we redefine `\maketitle` to put together the titlepages pages while suppressing page numbering and fancy headers. We have first a title page, then a completely blank page, then another title page, then greek and english abstract pages and last the contents.

```

154 \renewcommand{\maketitle}{%
155 \titlep
156 \setcounter{page}{1}
157 \thispagestyle{empty}%
158 \hbox{}%
159 \newpage
160 \titlep
161 \signaturepage
162 \grkabstractpage
163 \engabstractpage
164 \tableofcontents
165 \thispagestyle{empty}%
166 \hbox{}%
167 \newpage
168 \thispagestyle{fancy}
169 \pagenumbering{arabic}
170 }%

```


Change History

v1.0

General: Initial 'dithesis' doc class,
based on suthesis-2e.sty origi-

nally written by Joseph Pallas
and Emma Pease 1

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