

UiO : **Department of Informatics**
University of Oslo

uioletter — a package for creating official letters

Program source code and documentation

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31st January 2022



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THE UNIVERSITY OF OSLO has defined a new graphics standard¹ for its bicentennial celebrations in September 2011. This new standard includes official University letters, and the actual definition of such letters can be seen in Figure1 on the following page. This package implements this official definition in a L^AT_EX document class, but only for a subset of the university departments; in particular, the departments where I believe L^AT_EX is frequently used or which have asked to be included.

Program documentation system

This program was documented using the *web₀* package which is based on Donald Knuth's ideas of *literate programming*. For more information on the *web₀* implementation, see <https://www.mn.uio.no/ifi/personer/vit/dag/public/doc/web0.pdf>.

1 User guide for the uioletter package

The uioletter is used almost like the standard L^AT_EX document classes. The main differences are:

- The letter is placed in a `\begin{letter}...\end{letter}` environment; the name of the recipient and the address are given as parameters to this environment.
- The letter (inside the letter environment) should always start with an `\opening` command and end with a `\closing` command.
- The standard sectioning commands like `\chapter` and `\section` may not be used.

For a simple example, see the L^AT_EX code in Figure2 on page 5 which produces the result shown in Figure3 on page 6.

1.1 Class options

The document class recognises these language options:

norsk is used for Norwegian *bokmål*.

nynorsk is used when the letter is in Norwegian *nynorsk*.

UKenglish (or just **english**) specifies that the letter is written in British English.

USenglish (or **american**) indicates that American English is used.

(This implies that the familiar options `a4paper`, `12pt`, `twocolumn` etc are not recognized.)

In addition, the following departments are known:

¹A complete description (in Norwegian) of the new graphics standard can be found at <https://www.uio.no/om/designmanual/>.

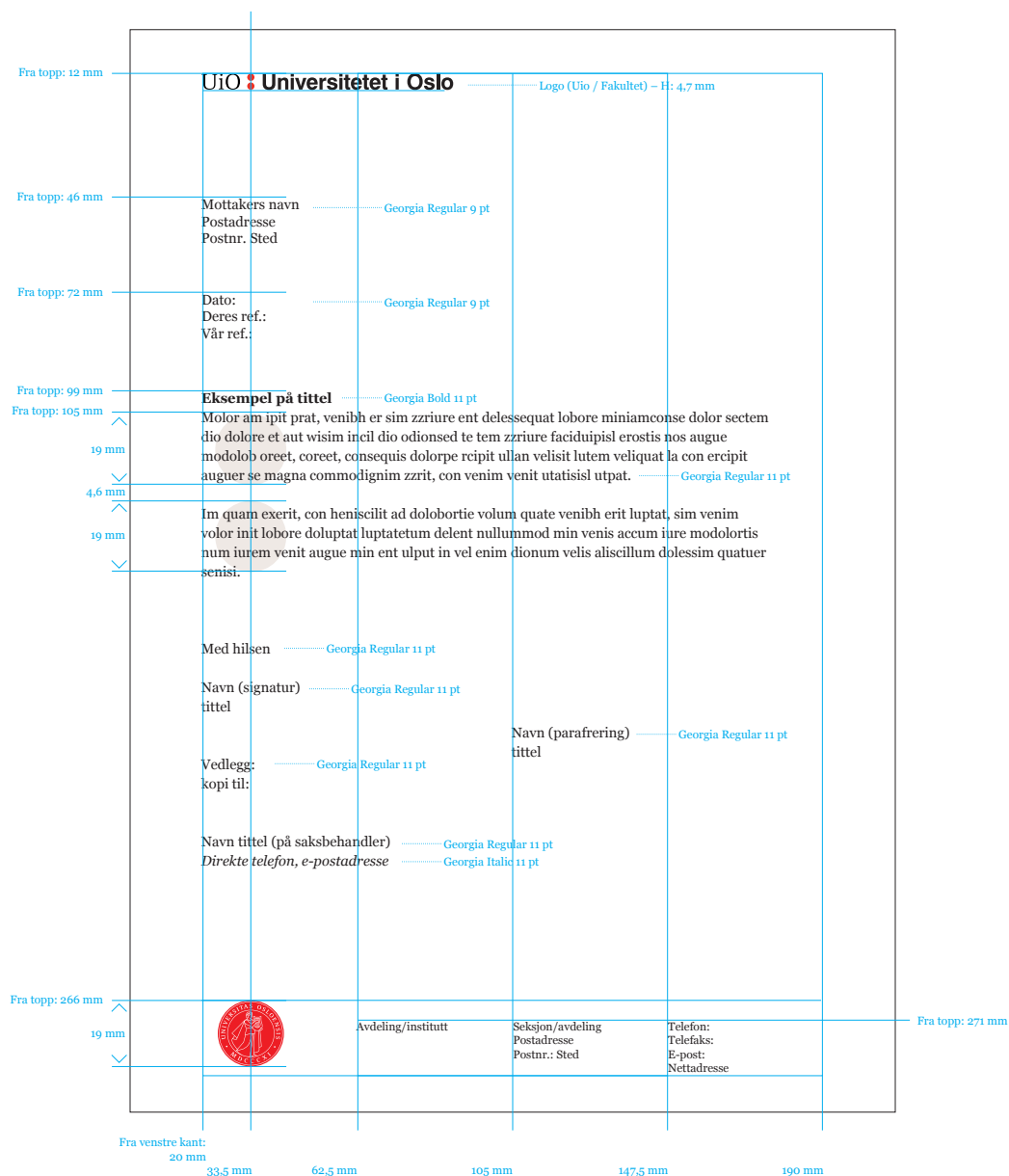


Figure 1: The official definition for letters from the University of Oslo (shown here in scale 1:2)

```

\documentclass[UKenglish,math]{uioletter}
\usepackage[utf8]{inputenc}
\usepackage[T1]{fontenc}
\usepackage{babel,textcomp}

\signature{My name}
\mytitle{my job title} %% Note! All lowercase

\ouremail{name@ifi.uio.no}
\ourweb{www.ifi.uio.no}

\begin{document}
\begin{letter}{Name of recipient\\ His or her address\\ 0000 Oslo}
  \opening{Greeting phrase,}

  The actual letter

  \closing{Yours sincerely,}
\end{letter}
\end{document}

```

Figure 2: L^AT_EX code for letter shown in Figure3 on the next page

geo is the *Department of Geosciences*.

ifi is the *Department of Informatics*; this is the default.

iln is the *Department of Linguistics and Scandinavian Studies*

ilos is the *Department of Literature, Area Studies and European Languages*

iss is the *Department of Sociology and Human Geography*

isv is the *Department of Political Science*

math is the *Mathematics department*.

usit is the *University's Center for Information Technology*.

1.1.1 Simplified author information

Some users feel that the author information in three columns at the bottom of the page (see illustration in Figure1 on the facing page) is a bit too excessive and prefer something simpler; an example of this simple layout can be found in Figure6 on page 10. To achieve this, use the `simplify` option.

simplify gives the author information in a simpler form.

1.2 Letter specifications

The following commands are used to specify additional information:

\cc tells who are to receive copies of this letter.

\closing is used to end the letter; the parameter specifies which words to use for farewell. This command should be present in all letters.

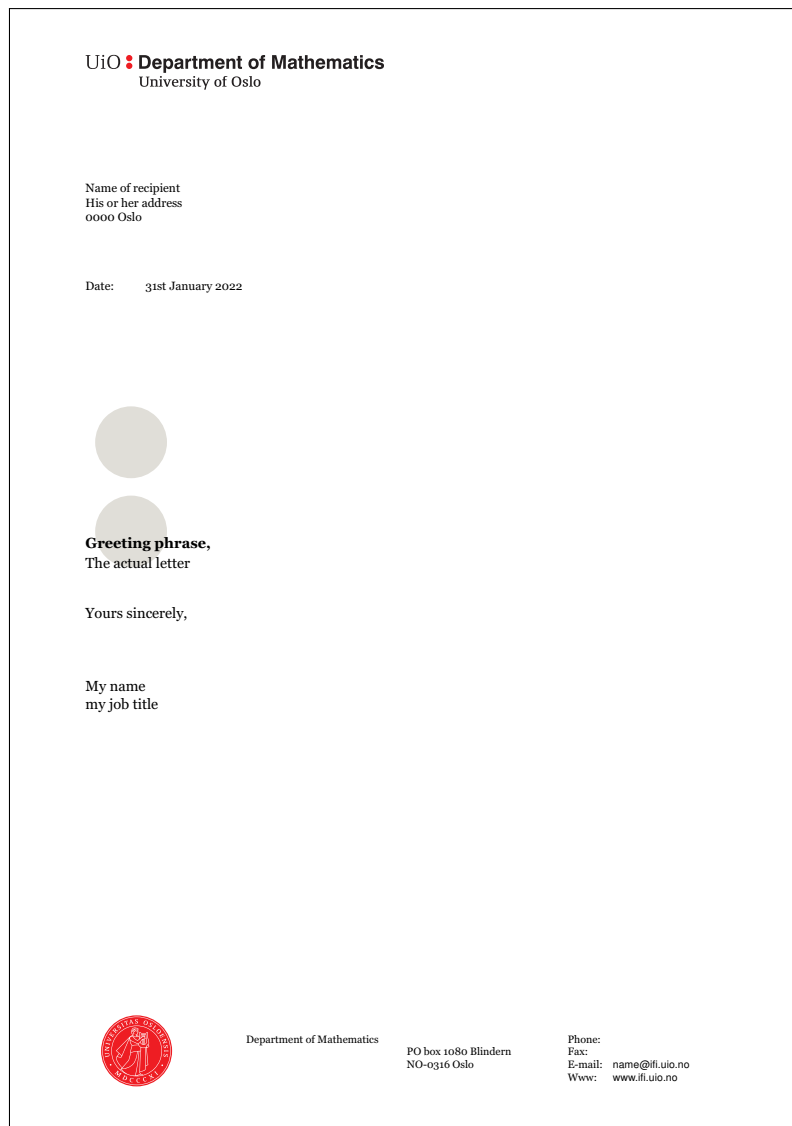


Figure 3: Official letter produced by the L^AT_EX code in Figure 2 on the previous page using the `uioletter` document class; the letter is shown in half scale

`\countersign` gives the name of the person countersigning the letter.

`\countersigntitle` can be used to give the job title of the person countersigning.

`\date` may be used to specify a date; the default is today's date.

`\encl` lists any enclosed material.

`\execaddr` is used to indicate the address (whether building, street address or e-mail address) of the executive.

`\executive` is employed to tell who will handle the case (if other than the author of the letter).

`\mytitle` supplies the author's job title.

`\opening` is used to start the letter; the parameter is the salutation. This command should be in every letter.

`\ouraddr` is used for the address of the writer's department.

`\ourcity` may be used to specify a city (if other than Oslo).

`\ouremail` tells the e-mail address of the writer or his or her department.

`\ourfax` gives the writer's fax number.

`\ourphone` specifies the phone number of the writer or his or her department.

`\ourref` provides the writer's reference number for the case.

`\oursect` is used for the writer's department section (if any).

`\ourweb` indicates the www address of the writer's department.

`\ourzip` may be used to change the postal zip number (in case the writer is not at the Department of Informatics).

`\signature` provides the author's name.

`\yourref` is for specifying the recipient's reference number for the case (if any).

1.3 Other specifications

The recipient of the letter and his or her address is given as a parameter to the `letter` environment. The name and the address are separated by a `\\`, as are the various lines of the address.

1.4 A complete demonstration

In Figure4 on the following page is shown some $\text{\LaTeX}$ code using *all* available commands; the result can be seen in Figure5 on page 9.

```

\documentclass[norsk]{uioletter}
\usepackage[utf8]{inputenc}
\usepackage[T1]{fontenc,url}    \urlstyle{sf}
\usepackage{babel,textcomp}

\signature{Dag Langmyhr}
\mytitle{universitetslektor}

\date{Medio juli 2010}
\ourref{Info 1/2010}
\yourref{2010-99-1}

\ouremail{dag@ifi.uio.no}
\oursect{OMS-gruppen}
\ourweb{www.ifi.uio.no}
\ouraddr{Ole-Johan Dahls hus}
\ourcity{Tigerstaden}
\ourzip{++++}
\ourphone{(228) 524 50}
\ourfax{(228) 524 10}

\countersign{En Medarbeider}
\countersigntitle{parafreringsperson}

\executive{En Saksbehandler}
\execaddr{konsulent@ifi.uio.no}

\begin{document}
\begin{letter}{Alle \LaTeX-brukere\ Universitetet i Oslo\ Oslo\ Norge}
  \opening{Kjære bruker}

  Dette er et brev som demonstrerer \LaTeX-klassen \texttt{uioletter}
  som kan benyttes for å skrive offisielle brev fra ansatte ved
  Universitetet i Oslo. På nettsiden
  \url{http://www.mn.uio.no/ifi/tjenester/it/hjelp/latex/} finnes en link til
  dokumentasjon for denne dokumentklassen (og diverse andre nyttige
  \LaTeX{}-klasser, -pakker og -dokumentasjon).

  I 2010 innførte Universitetet en ny grafisk profil. Den omfatter
  også offisielle brev, og \textsf{uioletter} følger denne nye
  standarden. Ytterligere informasjon om den nye grafiske profilen
  finnes på nettsiden \url{https://www.uio.no/om/designmanual/}.

  \closing{Med vennlig hilsen}

  \cc{Alle interesserte}
  \encl{Ingenting}
\end{letter}
\end{document}

```

Figure 4: L^AT_EX code demonstrating all possible options; the result is shown in Figure5 on the next page

UiO : Institutt for informatikk
Det matematisk-naturvitenskapelige fakultet

Alle L^AT_EX-brukere
Universitetet i Oslo
Oslo
Norge

Dato: Medio juli 2010
Deres ref: 2010-99-1
Vår ref: Info 1/2010

Kjære bruker

Dette er et brev som demonstrerer L^AT_EX-klassen uioletter som kan benyttes for å skrive offisielle brev fra ansatte ved Universitetet i Oslo. På nettsiden <http://www.mn.uio.no/ifi/tjenester/it/hjelp/latex/> finnes en link til dokumentasjon for denne dokumentklassen (og diverse andre nyttige L^AT_EX-klasser, -pakker og -dokumentasjon).

I 2010 innførte Universitetet en ny grafisk profil. Den omfatter også offisielle brev, og uioletter følger denne nye standarden. Ytterligere informasjon om den nye grafiske profilen finnes på nettsiden <https://www.uio.no/om/designmanual/>.

Med vennlig hilsen

Dag Langmyhr
universitetslektor

En Medarbeider
parafreringsperson

En Saksbehandler
konsulent@ifi.uio.no

Kopi sendt: Alle interesserte
Vedlegg: Ingenting



Institutt for informatikk

OMS-gruppen
Ole-Johan Dahls hus
++++ Tigerstaden

Telefon: (228) 524 50
Faks: (228) 524 10
E-post: dag@ifi.uio.no
Www: www.ifi.uio.no

Figure 5: Official letter produced by the L^AT_EX code in Figure 4 on the preceding page; the letter is shown in half scale

UiO : Institutt for informatikk
Det matematisk-naturvitenskapelige fakultet

Alle L^AT_EX-brukere
Universitetet i Oslo
Oslo
Norge

Dato: Medio juli 2010
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Kjære bruker

Dette er et brev som demonstrerer L^AT_EX-klassen uioletter som kan benyttes for å skrive offisielle brev fra ansatte ved Universitetet i Oslo. På nettsiden <http://www.ifi.uio.no/it/latex.html> finnes en link til dokumentasjon for denne dokumentklassen (og diverse andre nyttige L^AT_EX-klasser, -pakker og -dokumentasjon).

I 2010 innførte Universitetet en ny grafisk profil. Den omfatter også offisielle brev, og uioletter følger denne nye standarden. Ytterligere informasjon om den nye grafiske profilen finnes på nettsiden <http://www.uio.no/om/profil/>.

Med vennlig hilsen

Dag Langmyhr
universitetslektor



Postadresse: Ole-Johan Dahls hus, Gaustadalleen 23 A, 0316 Oslo
E-post: dag@ifi.uio.no
Www: www.ifi.uio.no

Figure 6: Simplified version of an official letter; the letter is shown in half scale

2 Implementation

All L^AT_EX class definitions consist of a standard part followed by code specific to that class.

```
#1 <uiolletter> ≡  
1 \NeedsTeXFormat{LaTeX2e}[1994/12/01] %% Any version, really.  
2 <standard document class information #2 (p.11)>  
3 <uiolletter definitions #6 (p.15)>  
4 \endinput  
(This code is not used.)
```

The uiolletter document class requires L^AT_EX 2_ε, but not any recent version.

Note that all internal names start with “\uiolletter@...” to avoid unintentional confusion with names in other packages.

2.1 Standard information

Every L^AT_EX 2_ε document class should contain some standard information.

2.1.1 Identification

All L^AT_EX 2_ε document classes identify themselves by their name, date and version number.

```
#2 <standard document class information> ≡  
5 \ProvidesPackage{uiolletter}[2020/03/02 v3.08d UiO document class]  
(This code is extended in #2a (p.11). It is used in #1 (p.11).)
```

2.1.2 Initial code

A few definitions may be necessary before the class can handle the options.

```
#2a <standard document class information #2 (p.11)> + ≡  
6 <initial definitions #3 (p.11)>  
(This code is extended in #2b (p.12).)
```

2.2 Language adaption

A few words and phrases are different in different languages.

2.2.1 Norwegian *bokmål*

```
#3 <initial definitions> ≡  
7 \newcommand{\uiolletter@bokmaal}{%  
8 \def \uiolletter@address@name {Postadresse}%  
9 \def \uiolletter@date@name {Dato}%  
10 \def \uiolletter@ouraddr@name {Postboks 1080 Blindern}%  
11 \def \uiolletter@email@name {E-post}%  
12 \def \uiolletter@fax@name {Faks}%  
13 \def \uiolletter@phone@name {Telefon}%  
14 \def \uiolletter@ourref@name {V\aa r ref}%  
15 \def \uiolletter@ourzip@name {0316}%  
16 \def \uiolletter@yourref@name {Deres ref}}  
(This code is extended in #3a (p.11). It is used in #2a (p.11).)
```

This is the default:

```
#3a <initial definitions #3 (p.11)> + ≡  
17 \uiolletter@bokmaal  
(This code is extended in #3b (p.12).)
```

2.2.2 Norwegian *nynorsk*

Nynorsk is almost identical to Bokmål.

```
#3b {initial definitions #3 (p.11)} +≡
18 \newcommand{\uiolletter@nynorsk}{%
19 \uiolletter@bokmaal
20 \def \uiolletter@yourref@name {Dykkar ref}}
(This code is extended in #3c (p.12).)
```

2.2.3 English

There is no difference between British and American English in these words.

```
#3c {initial definitions #3 (p.11)} +≡
21 \newcommand{\uiolletter@english}{%
22 \def \uiolletter@address@name {Mail address}%
23 \def \uiolletter@date@name {Date}%
24 \def \uiolletter@ouraddr@name {PO box 1080 Blindern}%
25 \def \uiolletter@email@name {E-mail}%
26 \def \uiolletter@fax@name {Fax}%
27 \def \uiolletter@phone@name {Phone}%
28 \def \uiolletter@ourref@name {Our ref}%
29 \def \uiolletter@ourzip@name {NO-0316}%
30 \def \uiolletter@yourref@name {Your ref}}
```

2.3 Class options

The uiolletter class recognises some options.

```
#2b {standard document class information #2 (p.11)} +≡
31 {class option declarations #4 (p.12)}
32 \ProcessOptions* \relax
(This code is extended in #2c (p.14).)
```

2.3.1 Class options

These departments/units are known:

```
#4 {class option declarations} ≡
33 \DeclareOption{geo}{\def \uiolletter@dept{geo}%
34 \def \uiolletter@dept@bm{Institutt for geofag}%
35 \def \uiolletter@dept@nn{Institutt for geofag}%
36 \def \uiolletter@dept@eng{Department of Geosciences}%
37 \def \uiolletter@fac{mn}}%
38 \DeclareOption{ifi}{\def \uiolletter@dept{ifi}%
39 \def \uiolletter@dept@bm{Institutt for informatikk}%
40 \def \uiolletter@dept@nn{Institutt for informatikk}%
41 \def \uiolletter@dept@eng{Department of Informatics}%
42 \def \uiolletter@fac{mn}}%
43 \DeclareOption{iln}{\def \uiolletter@dept{iln}%
44 \def \uiolletter@dept@bm{Institutt for lingvistiske og nordiske studier}%
45 \def \uiolletter@dept@nn{Institutt for lingvistiske og nordiske studium}%
46 \def \uiolletter@dept@eng{Department of Linguistics and Scandinavian Studies}%
47 \def \uiolletter@fac{hf}}%
48 \DeclareOption{ilos}{\def \uiolletter@dept{ilos}%
49 \def \uiolletter@dept@bm{Institutt for litteratur, områdestudier og
50 europeiske språk}%
51 \def \uiolletter@dept@nn{Institutt for litteratur, områdestudium og
52 europeiske språk}%
53 \def \uiolletter@dept@eng{Department of Literature, Area Studies and
54 European Languages}%
55 \def \uiolletter@fac{hf}}%
```

```

56 \DeclareOption{iss}{\def \uioletter@dept{iss}%
57 \def \uioletter@dept@bm{Institutt for sosiologi og samfunnsgeografi}%
58 \def \uioletter@dept@nn{Institutt for sosiologi og samfunnsgeografi}%
59 \def \uioletter@dept@eng{Department of Sociology and Human Geography}%
60 \def \uioletter@fac{sv}}%
61 \DeclareOption{isv}{\def \uioletter@dept{isv}%
62 \def \uioletter@dept@bm{Institutt for statsvitenskap}%
63 \def \uioletter@dept@nn{Institutt for statsvitenskap}%
64 \def \uioletter@dept@eng{Department of Political Science}%
65 \def \uioletter@fac{sv}}%
66 \DeclareOption{math}{\def \uioletter@dept{math}%
67 \def \uioletter@dept@bm{Matematisk institutt}%
68 \def \uioletter@dept@nn{Matematisk institutt}%
69 \def \uioletter@dept@eng{Department of Mathematics}%
70 \def \uioletter@fac{mn}}
71 \DeclareOption{usit}{\def \uioletter@dept{usit}%
72 \def \uioletter@dept@bm{Universitetets senter for informasjonsteknologi}%
73 \def \uioletter@dept@nn{Universitetets senter for informasjonsteknologi}%
74 \def \uioletter@dept@eng{University Center for Information Technology}%
75 \def \uioletter@fac{none}}

```

(This code is extended in #4_a (p.13). It is used in #2_b (p.12).)

In addition, the following language options are recognised:

#4_a *(class option declarations #4 (p.12))* +≡

```

76 \DeclareOption{american}{\ExecuteOptions{USenglish}}
77 \DeclareOption{english}{\ExecuteOptions{UKenglish}}
78 \DeclareOption{norsk}{\uioletter@bokmaal
79 \def \uioletter@suffix {bm}
80 \PassOptionsToPackage{norsk}{babel}}
81 \DeclareOption{nynorsk}{\uioletter@nynorsk
82 \def \uioletter@suffix {nn}
83 \PassOptionsToPackage{nynorsk}{babel}}
84 \DeclareOption{UKenglish}{\uioletter@english
85 \def \uioletter@suffix {eng}
86 \PassOptionsToPackage{UKenglish}{babel}}
87 \DeclareOption{USenglish}{\uioletter@english
88 \def \uioletter@suffix {eng}
89 \PassOptionsToPackage{USenglish}{babel}}

```

(This code is extended in #4_b (p.13).)

In this class, Norwegian is the default language.

#4_b *(class option declarations #4 (p.12))* +≡

```

90 \uioletter@bokmaal

```

(This code is extended in #4_c (p.13).)

The user may specify a simplified format for the author information.

#4_c *(class option declarations #4 (p.12))* +≡

```

91 \DeclareOption{simplify}{\uioletter@simpletrue}

```

(This code is extended in #4_d (p.13).)

This is not the default.

#4_d *(class option declarations #4 (p.12))* +≡

```

92 \newif \ifuioletter@simple
93 \uioletter@simplefalse

```

(This code is extended in #4_e (p.13).)

Ifi is the default department.

#4_e *(class option declarations #4 (p.12))* +≡

```

94 \ExecuteOptions{ifi}

```

(This code is extended in #4_f (p.14).)

2.3.2 Ignored options

Options for paper size are silently ignored.

```
#4f  $\langle$ class option declarations #4 (p.12) $\rangle$  +  $\equiv$   
95 \DeclareOption{a4paper}{}  
(This code is extended in #4g (p.14).)
```

2.3.3 Other options

No other options are legal.

```
#4g  $\langle$ class option declarations #4 (p.12) $\rangle$  +  $\equiv$   
96 \DeclareOption*{%  
97 \ClassWarning{uioletter}{Option '\CurrentOption' is not recognised}}
```

2.4 The base class

The uioletter document class is an extension of the standard letter class using A4 paper size and 11 pt font size.

```
#2c  $\langle$ standard document class information #2 (p.11) $\rangle$  +  $\equiv$   
98  $\langle$ load packages #5 (p.14) $\rangle$   
99 \LoadClass[a4paper,11pt]{letter}
```

2.5 Required packages

Some support packages are needed.

2.5.1 Different languages

Language issues in L^AT_EX are handled by the babel package.

```
#5  $\langle$ load packages $\rangle$   $\equiv$   
100 \RequirePackage{babel}  
(This code is extended in #5a (p.14). It is used in #2c (p.14).)
```

2.5.2 Calculations

To make size calculations easier to read, the calc package is very useful.

```
#5a  $\langle$ load packages #5 (p.14) $\rangle$  +  $\equiv$   
101 \RequirePackage{calc}  
(This code is extended in #5b (p.14).)
```

2.5.3 Graphics

To insert graphics (like logos) we need the graphicx package.

```
#5b  $\langle$ load packages #5 (p.14) $\rangle$  +  $\equiv$   
102 \RequirePackage{graphicx}  
(This code is extended in #5c (p.14).)
```

2.5.4 Tables

The tabularx package helps produce better-looking tables.

```
#5c  $\langle$ load packages #5 (p.14) $\rangle$  +  $\equiv$   
103 \RequirePackage{tabularx}  
(This code is extended in #5d (p.15).)
```

2.5.5 Placing fixed elements

The package `textpos` makes it possible to place anything at a specified position on the page.

#5_d *(load packages #5 (p.14))* +≡
104 `\RequirePackage[absolute]{textpos}`
(This code is extended in #5_e (p.15).)

2.5.6 Typeface

The official typeface for letters is Georgia.

#5_e *(load packages #5 (p.14))* +≡
105 `\RequirePackage{uiofont}`

2.6 User interface

The following new commands are defined:

- `\countersign` gives the name of the countersigner (if any).

#6 *(uioletter definitions)* ≡
106 `\newcommand{\countersign}[1]{\def \uioletter@countersign {#1}}`
107 `\def \uioletter@countersign {}`
(This code is extended in #6_a (p.15). It is used in #1 (p.11).)

- `\countersigntitle` gives the title of the person countersigning (if any).

#6_a *(uioletter definitions #6 (p.15))* +≡
108 `\newcommand{\countersigntitle}[1]{\def \uioletter@countertitle {#1}}`
109 `\def \uioletter@countertitle {}`
(This code is extended in #6_b (p.15).)

- `\executive` indicates the name of the executive officer handling this case.

#6_b *(uioletter definitions #6 (p.15))* +≡
110 `\newcommand{\executive}[1]{\def \uioletter@executive {#1}}`
111 `\def \uioletter@executive {}`
(This code is extended in #6_c (p.15).)

- `\execaddr` indicates the address (e-mail address, phone or other) of the executive officer handling this case.

#6_c *(uioletter definitions #6 (p.15))* +≡
112 `\newcommand{\execaddr}[1]{\def \uioletter@execaddr {#1}}`
113 `\def \uioletter@execaddr {}`
(This code is extended in #6_d (p.15).)

- `\mytitle` gives the writer's job title; the default is to leave it empty.

#6_d *(uioletter definitions #6 (p.15))* +≡
114 `\newcommand{\mytitle}[1]{\def \uioletter@mytitle {#1}}`
115 `\def \uioletter@mytitle {}`
(This code is extended in #6_e (p.16).)

- `\ouraddr` gives the writer's post address; the default is the one for the Department of Informatics: *Postboks 1080 Blindern/PO box 1080 Blindern*.

#6_e *(uioletter definitions #6 (p.15))* +≡
 116 `\newcommand{\ouraddr}[1]{\def \uioletter@ouraddr {#1}}`
 117 `\def \uioletter@ouraddr {\uioletter@ouraddr@name}`
(This code is extended in #6_f (p.16).)

- `\ourcity` gives the writer's city; the default is *Oslo*.

#6_f *(uioletter definitions #6 (p.15))* +≡
 118 `\newcommand{\ourcity}[1]{\def \uioletter@ourcity {#1}}`
 119 `\def \uioletter@ourcity {Oslo}`
(This code is extended in #6_g (p.16).)

- `\ouremail` gives the writer's e-mail address;² the default is to leave this empty.

#6_g *(uioletter definitions #6 (p.15))* +≡
 120 `\newcommand{\ouremail}[1]{\def \uioletter@ouremail {#1}}`
 121 `\def \uioletter@ouremail {}`
(This code is extended in #6_h (p.16).)

- `\ourfax` gives the writer's fax number; the default is to leave this empty.

#6_h *(uioletter definitions #6 (p.15))* +≡
 122 `\newcommand{\ourfax}[1]{\def \uioletter@ourfax {#1}}`
 123 `\def \uioletter@ourfax {}`
(This code is extended in #6_i (p.16).)

- `\ourphone` gives the phone number of the writer's department; the default is to leave it empty.

#6_i *(uioletter definitions #6 (p.15))* +≡
 124 `\newcommand{\ourphone}[1]{\def \uioletter@ourphone {#1}}`
 125 `\def \uioletter@ourphone {}`
(This code is extended in #6_j (p.16).)

- `\ourref` specifies the sender's reference number.

#6_j *(uioletter definitions #6 (p.15))* +≡
 126 `\newcommand{\ourref}[1]{\def \uioletter@ourref {#1}}`
 127 `\def \uioletter@ourref {}`
(This code is extended in #6_k (p.16).)

- `\oursect` gives the writer's section; the default is to leave this empty.

#6_k *(uioletter definitions #6 (p.15))* +≡
 128 `\newcommand{\oursect}[1]{\def \uioletter@oursect {#1}}`
 129 `\def \uioletter@oursect {}`
(This code is extended in #6_l (p.17).)

²The specifications are unclear whether this is the sender's or the department's e-mail address.

- `\ourweb` gives the web address of the sender's unit the default is to use the University's web address.

```
#6l {uioletter definitions #6 (p.15)} +≡
130 \newcommand{\ourweb}[1]{\def \uioletter@ourweb {#1}}
131 \def \uioletter@ourweb {www.uio.no}
(This code is extended in #6m (p.17).)
```

- `\ourzip` gives the writer's zip code in the postal address; the default is the one for the Department of Informatics: 0316/NO-0316.

```
#6m {uioletter definitions #6 (p.15)} +≡
132 \newcommand{\ourzip}[1]{\def \uioletter@ourzip {#1}}
133 \def \uioletter@ourzip {\uioletter@ourzip@name}
(This code is extended in #6n (p.17).)
```

- `\yourref` specifies the recipient's reference number.

```
#6n {uioletter definitions #6 (p.15)} +≡
134 \newcommand{\yourref}[1]{\def \uioletter@yourref {#1}}
135 \def \uioletter@yourref {}
(This code is extended in #6o (p.17).)
```

3 Letter setup

Figure1 on page 4 specifies what an official letter from the University of Oslo should look like.

3.1 Fixed elements

Since all letters are created in a letter environment, the various fixed elements are best handled by attaching them to this environment.

```
#6o {uioletter definitions #6 (p.15)} +≡
136 \let \uioletter@orig@letter = \letter
137 \renewcommand{\letter}[1]{%
138 \uioletter@orig@letter{#1}%
139 \uioletter@addFixedElements
140 {first page style #14 (p.21)}
141 {specify text layout #13 (p.20)}}
(This code is extended in #6p (p.17).)
```

The `\uioletter@addFixedElements` macro adds all the fixed elements on the front page using the `textblock` environment from the `textpos` package (see Section 2.5.5 on page 15).

```
#6p {uioletter definitions #6 (p.15)} +≡
142 \newcommand{\uioletter@addFixedElements}{%
143 {place department name #7 (p.18)}
144 {add recipient #8 (p.18)}
145 {add date #9 (p.18)}
146 {add colon #10 (p.19)}
147 {add university seal #11 (p.19)}
148 {add sender information #12 (p.19)}}
(This code is extended in #6q (p.18).)
```

3.1.1 The name of the department

This name is, together with the faculty name, defined to be 9.3 mm high and goes in the top left corner, 12 mm from the top and 20 mm from the left edge.

```
#7 {place department name} ≡
149 \begin{textblock*}{15cm}(20mm,12mm)
150   \includegraphics[height=9.3mm]{%
151     \uioletter@fac-\uioletter@dept-\uioletter@suffix}
152 \end{textblock*}
(This code is used in #6p (p.17).)
```

3.1.2 The recipient

The name and address of the recipient should be placed exactly 46 mm from the top and 20 mm from the left edge.³ It should use 9 pt type size.

```
#8 {add recipient} ≡
153 \begin{textblock*}{17cm}(20mm,46mm)
154   \footnotesize
155   \toname\\
156   \toaddress\null
157 \end{textblock*}
(This code is used in #6p (p.17).)

(The \null avoids error messages in case the address is empty.)
```

3.1.3 Date and reference numbers

The date and references (if any) go beneath the recipient. (Even though it has not been specified, I have decided to tabulate the entries; I think it looks a lot better that way.)

```
#9 {add date} ≡
158 \begin{textblock*}{17cm}(20mm,72mm)
159   \footnotesize
160   \ifthenelse{\boolean{uioletter@date}}{
161     {\makebox[45pt][l]{\uioletter@date@name:}\uioletter@date@cmd}
162     {\mbox{}}
163   \ifthenelse{\equal{\uioletter@yourref}{}}{
164     {\ \makebox[45pt][l]{\uioletter@yourref@name:}\uioletter@yourref}%
165   \ifthenelse{\equal{\uioletter@ourref}{}}{
166     {\ \makebox[45pt][l]{\uioletter@ourref@name:}\uioletter@ourref}
167   \end{textblock*}
(This code is used in #6p (p.17).)
```

As you can see, we drop the prefix for missing items. Testing for an empty date, however, is more complicated and involves testing for the use of particular packages that adapt the \today command.

```
#6q {uioletter definitions #6 (p.15)} +≡
168 \newboolean{uioletter@date} \setboolean{uioletter@date}{false}
169 \def \uioletter@date@cmd {\@date}
170 \AtBeginDocument{
171   \ifthenelse{\isundefined{\iso@printday}}{%% Package isodate loaded?
172     {}
173     {\setboolean{uioletter@date}{true}%
174       \def \uioletter@date@cmd {\today}}
175   \ifthenelse{\equal{\@date}{}}{%% \date{} ?
176     {}
177     {\setboolean{uioletter@date}{true}}}
178 }
(This code is extended in #6r (p.19).)
```

³My guess is that a fixed position makes it easy to used envelopes with a window.

3.1.4 A transparent colon

One distinctive part of the profile is a big transparent colon where each dot is 19 mm tall; it should go behind the text and be $(2 \times 19 + 4.6 =)$ 42.6 mm high, positioned 105 mm from the top and 2.5 mm from the left margin.⁴

#10 `\add colon` $\equiv$
179 `\begin{textblock*}{20mm}(22.5mm,105mm)`
180 `\includegraphics{uio-bg-colon}`
181 `\end{textblock*}`
(This code is used in #6_p (p.17).)

3.1.5 The University seal

The seal goes in the bottom left corner, 266 mm from the top. It should be 19 mm tall and the center should be 33.5 mm from the left edge. (In other words, the seal should be positioned $(33.5 - 19/2 =)$ 24 mm from the left edge.)

#11 `\add university seal` $\equiv$
182 `\begin{textblock*}{19mm}(24mm,266mm)`
183 `\includegraphics[height=19mm]{uio-off-logo}`
184 `\end{textblock*}`
(This code is used in #6_p (p.17).)

3.1.6 Sender information

The sender information can be shown in either the full three-column format, as demonstrated in Figure 5 on page 9, or in simplified form, as shown in Figure 6 on page 10.

#12 `\add sender information` $\equiv$
185 `\ifuiolletter@simple`
186 `{\def \{\,}%`
187 `\global \setbox0 = \hbox{\scriptsize \uiolletter@ouraddr\}`
188 `\uiolletter@ourzip~\uiolletter@ourcity}}%`
189 `\uiolletter@simpleauthorinfo`
190 `\else`
191 `\uiolletter@fullauthorinfo`
192 `\fi`
(This code is used in #6_p (p.17).)

3.1.6.1 Full format Beside the seal (at 62.5 mm from the left edge and 271 mm from the top) comes various information about the sender.⁵

#6_r `\uiolletter definitions #6 (p.15)` $+ \equiv$
193 `\newcommand{\uiolletter@fullauthorinfo}{%`
194 `\begin{textblock*}{147,5mm}(62.5mm,271mm)`
195 `\scriptsize`
196 `\begin{tabularx}{127.5mm}[t]{@{}}%`
197 `>\raggedrightX@{}}%`
198 `>\raggedrightX@{}}%`
199 `>\raggedrightX@{}}%`
200 `\csname uiolletter@dept\uiolletter@suffix\endcsname&`
201 `\ifthenelse{\equal{\uiolletter@oursect}{}}{~}`
202 `{\uiolletter@oursect}\}`
203 `\uiolletter@ouraddr\}`
204 `\uiolletter@ourzip~\uiolletter@ourcity&`
205 `\makebox[4em][l]{\uiolletter@phone@name:} \uiolletter@ourphone\}`
206 `\makebox[4em][l]{\uiolletter@fax@name:} \uiolletter@ourfax\}`

⁴The distance from the left margin is not explicitly specified but are according to my measurements.

⁵The font size for this information is not specified, but I guess 7 pt will be ok.

```

207      \makebox[4em][l]{\uioletter@email@name:}
208      \textsf{\uioletter@ouremail}\\
209      \makebox[4em][l]{Www:} \textsf{\uioletter@ourweb}\\
210      \tabularnewline
211      \end{tabularx}
212      \end{textblock*}}

```

(This code is extended in #6_s (p.20).)

3.1.6.2 Simplified format This defines the layout of the simplified format.

#6_s *{uioletter definitions #6 (p.15)}* +≡

```

213 \newcommand{\uioletter@simpleauthorinfo}{%
214 \begin{textblock*}{147,5mm}(62.5mm,271mm)
215 \scriptsize
216 \begin{tabular}{ll}
217 \uioletter@address@name:& \box\\
218 \uioletter@email@name:& \textsf{\uioletter@ouremail}\\
219 Www:& \textsf{\uioletter@ourweb}\\
220 \end{tabular}
221 \end{textblock*}}

```

(This code is extended in #6_t (p.20).)

3.2 Text layout

The text layout is defined partly in the text preamble (i.e., before `\begin{document}`) and partly in the letter environment.

3.2.1 Margins

Left and right margin are defined to be 20 mm.

#6_t *{uioletter definitions #6 (p.15)}* +≡

```

222 \setlength{\oddsidemargin}{20mm-1in}
223 \setlength{\textwidth}{21cm-20mm-20mm}

```

(This code is extended in #6_u (p.20).)

The vertical margins are not defined, but my estimates are 46 mm top margin and $((297 - 266) + (105 - 99) =)$ 37 mm bottom margin.

#6_u *{uioletter definitions #6 (p.15)}* +≡

```

224 \setlength{\topmargin}{46mm-1in-\headheight-\headsep}
225 \setlength{\textheight}{29.7cm-46mm-37mm}

```

(This code is extended in #6_v (p.21).)

On the first page of a letter, we must add some extra vertical space so that the title line is 99 mm from the top of the page.

#13 *{specify text layout}* ≡

```

226 \vspace*{-1in}
227 \vspace*{-\topmargin}
228 \vspace*{-\headheight}
229 \vspace*{-\headsep}
230 \vspace*{99mm}
231 \vspace*{-1.5ex}

```

(This code is extended in #13_a (p.20). It is used in #6_o (p.17).)

The text lines should have have a baseline distance of 5 mm⁶ and be ragged right.

#13_a *{specify text layout #13 (p.20)}* +≡

```

232 \setlength{\baselineskip}{5mm plus 1pt minus 1pt}

```

⁶Even though it is not specified (and probably never even considered ☺) I have added a 1 pt stretch and shrink.

```
233 \raggedright
    (This code is extended in #13b (p.21).)
```

The paragraphs should be unindented but be separated by a blank line.

```
#13b {specify text layout #13 (p.20)} +≡
234 \setlength{\parindent}{0pt}%
235 \setlength{\parskip}{5mm plus 2pt minus 2pt}
```

3.3 Page styles

The `uioletter` class does not define any new page styles. The front page of a letter uses the empty style and any subsequent pages use the standard plain style with just a page number on the bottom of the page.⁷

```
#14 {first page style} ≡
236 \thispagestyle{empty}
    (This code is used in #6o (p.17).)
```

3.4 The opening

The `\opening` command is used to produce the greeting and must be completely redefined.

```
#6v {uioletter definitions #6 (p.15)} +≡
237 \renewcommand{\opening}[1]{%
238 \textbf{#1}\par \vspace{1pt}\vspace{-\baselineskip}}
    (This code is extended in #6w (p.21).)
```

Note that there should be very little spacing after the heading.

3.5 The closing

The `\closing` command is used for the signature. The definition uses a `minipage` to inhibit page breaks.

```
#6w {uioletter definitions #6 (p.15)} +≡
239 \renewcommand{\closing}[1]{\par\vspace{1\baselineskip}
240 \begin{minipage}{\textwidth}
241 #1\par
242 \vspace{3\baselineskip}
243 \mbox{}\fromsig\
244 \mbox{}\uioletter@mytitle\
245 {add countersignature #15 (p.21)}
246 {add executive #16 (p.22)}
247 \end{minipage}\par
248 {additions format #17 (p.22)}}
```

3.5.1 Countersignatures

An additional person may countersign the document. This is indicated by flushing this signature (105 – 20 =) 85 mm right.

```
#15 {add countersignature} ≡
249 \leavevmode \hspace*{85mm}%
250 \begin{minipage}{85mm}
251 \mbox{}%
252 \ifthenelse{\equal{\uioletter@countersign}{}}{}{
253 {\uioletter@countersign}\}%
```

⁷The University's specifications say nothing about other pages than the first one, so using the plain style is my decision.

```

254 \mbox{}%
255 \ifthenelse{\equal{\uiioletter@countertitle}{}}{}
256 {\uiioletter@countertitle}
257 \end{minipage}\par

```

(This code is used in #6_w (p.21).)

3.5.2 Add executive officer

If an executive officer has been assigned, his or her name must be entered.

#16 *{add executive}* ≡

```

258 \mbox{}%
259 \ifthenelse{\equal{\uiioletter@executive}{}}{}
260 {\par \vspace*{\parskip}
261 \mbox{}\uiioletter@executive
262 \ifthenelse{\equal{\uiioletter@execaddr}{}}{}
263 {\ \emph{\uiioletter@execaddr}}
264 }

```

(This code is used in #6_w (p.21).)

3.5.3 Additions

The user may specify copies and enclosures using the \cc and \encl commands, respectively. These follow the signature and should be formatted slightly differently.

#17 *{additions format}* ≡

```

265 \vspace{\parskip}
266 \setlength{\parskip}{0pt}

```

(This code is used in #6_w (p.21).)

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