UF mathdepartment letter style

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ver. 2.0, June 15 2007 (printed December 20, 2013)

1 Usage

This file is designed as a replacement for the LaTeX 2_ε standard letter class. The best way to use it is to get a copy of the file `blank-ufmathletter.tex`, which will be in the same directory as this file. That file is a template which is to be filled out to create a letter. You will probably want to make your own template file: get a copy of the general template file and fill your personal information and other items which will be the same for all your letters.

More information on using the LaTeX letter class may be found in most books which cover LaTeX. This note discusses a few ways in which the UF mathdepartment letter class file differs from the standard letter class, and gives a few extra hints.

`\date`
`\name`
`\location`
`\telephone`
`\signature`
`\UFMtitle`
`\UFMemail`

Personal information. These macros should be used in the prefix, before `\begin{document}`, to give the personal information used in the return address and closing. All are optional except `\name`, and all are used as follows:

```
%     \name{Dr. Joe Doakes}
%     \signature{Joe Doakes\\President}
%
```

Note that `\\` can be used to break an entry into more than one line. By default, `\signature` will be set to the value of `\name` and `\date` will be the current date. all others will be omitted if not specified. All of these commands are from the standard LaTeX letter class except those starting with `UFM`.

Changing line width. The page parameters `\oddsidemargin` and `\textwidth` may be changed by the user. For example, the following commands will shrink the line length by 1 inch.

```
% \addtolength{\textwidth}{-1in}
% \addtolength{\oddsidemargin}{.5in}
%
```

Avoiding page breaks. This seems to be better at fitting a letter onto one page than my last attempt at a letterhead style, but sometimes it still needs help. The following command will force the whole letter onto one page, if it is at all reasonable. It should appear somewhere in the body of the letter.

```
% \enlargethispage*{2in}
%
```

Also, the letter class strongly avoids breaking a paragraph between pages, so it may help to break a paragraph into two.

`nofound` **Miscellaneous.** Three new options are provided. The option `nofound`, used as follows, will supress printing the slogan "The Foundation of The Gator Nation" at the bottom of the first page.

```
%     \documentclass[nofound]{ufmathletter}
%
```

`color`   The option `color` should be used with a color printer. The default is
`bw`   black and white, which need not be explicitly specified by the option `bw`.

The standard print size options, such as `10pt`, `11pt` and `12pt` may be used as normal. They will not affect the letterhead.

`\hoffset`   Printers vary in the placement of printing on the page. The commands
`\voffset` `\hoffset` and `\voffset` may be used to adjust the output from a particular printer. They is used as follows:

$$\setlength{\hoffset}{ \langle error \rangle\ \mathtt{in}}$$

where $\langle error \rangle$ is the distance (in inches) which the letterhead should be moved to the *right*. A negative value will move it left. For vertical movement, a positive argument to `\voffset` will move the printing down. According to university specifications, the left side of the Logo should be 2.75 picas (.45 inch) from the left edge and the top of the Logo should be 3.75 picas (.625 inch) from the top edge.

The full documentation and code.   In order to print out full documentation on this file (including a listing of the code) comment out the line with the command `\OnlyDescription` (this is about line 33 of the file).

Send any bug reports or suggestions to Bill Mitchell, *mitchell@math.ufl.edu.*

2   The code

This class is derived from the standard LaTeX 2$_\varepsilon$ letter class, originally following ideas in Appendix C of *A Guide to LaTeX 2$_\varepsilon$* by Kopka and Daly. We begin by declaring the options, then load the `letter` class.

nofound
color
bw

All three options simply set a flag for later reference. Note that the option `bw` actually does nothing, since it is the default. However that may change.

```
1  \newif\ifnofoundation            % Don't print foundation line
2  \DeclareOption{nofound}{\nofoundationtrue}
3  \newif\ifcolor
4  \DeclareOption{color}{\colortrue}
5  \DeclareOption{bw}{\colorfalse} % Default
6
7  \DeclareOption*{\PassOptionsToClass{\CurrentOption}{letter}}
8  \ProcessOptions
9  \LoadClass{letter}
10
```

2.1   Personal information

Here we deal with things which are likely to need to be modified. In particular, the part of the letterhead giving the department name and the departmental address is specified here. The personal data of the actual letter writer is specified in the letter file; howver it is probable that the way such material is presented (which is specified here) could be improved.

\fromname
\fromlocation
\telephonenum
\UFM@title
\UFM@email
\UFMtitle
\UFMemail

The commands `\UFM@title` and `\UFM@email` are initially defined to be empty. User level commands `\UFMtitle{⟨title⟩}` and `\UFMemail{⟨email address⟩}` are provided to set them. The commands `\fromname`, `\fromlocation`, and `telephonenum` are handled similarly by the standard LaTeX letter class.

```
11  \newcommand*\UFMtitle[1]{\def\UFM@title{#1}}
12  \UFMtitle{}
```

```
13 \newcommand*\UFMemail[1]{\def\UFM@email{#1}}
14 \UFMemail{}
15 \newcommand*\UFMurl[1]{\def\UFM@url{#1}}
16 \UFMurl{}
17
```

\UFMunitnames This would be modified for use by a different department. This was written to agree with the illustration in the university specifications. It might be more useful to have the Department be the "primary unit", and the text of the specifications seems to me to suggest this alternative as the department is the unit to which replies should be sent.

```
18 \newcommand{\UFMunitnames}{
19     \setlength{\tabcolsep}{0pt}
20     \begin{tabular}[t]{l}
21       {\blue\PRIMARYUNITFNT College of
22         Liberal Arts and Sciences}
23       \\
24       {\blue\DEPTNAMEFNT Department of Mathematics}
25     \end{tabular}
26 }
```

\UFMreturnaddress This would also have to be modified (in the obvious way) for use by a different department.

The text here will stick out the bottom of the heading, but does not change TeX's notion of the size of the box containing the head. Thus there is no explicit provision to ensure that this material doesn't overlap the actual letter.

```
27 \newcommand{\UFMreturnaddress}{
28   \setlength{\tabcolsep}{0pt}
29   {
30       \def\arraystretch{.85}%
31       \DEPTADDRFNT\blue
32       \begin{tabular}[t]{l}
33         358 Little Hall\\
34         PO Box 118105\\
35         Gainesville, FL 32611-8105\\[2pt]
36         Dept: (352) 392-0281\\
37         Fax:  (352) 392-8357\\
38         http:/\kern-2.5pt/\kern-.8ptwww.math.ufl.edu/\\
39         \mbox{}\\
```

4

```
40          \the\UFMpersonaladdress
41        \end{tabular}%
42      }
43 }
```

Modifications to the presentation of personal information would be made here. Note that the actual information is specified in the file with the letter. Any of these items can be omitted simply by not defining them there, so a modification would only be needed if it is desired to present this information elsewhere in the letter or differently here.

```
44 \newtoks\UFMpersonaladdress
45 \UFMpersonaladdress={
46 %        \ifx\fromname\empty\else\\\black\fromname\fi
47          \ifx\UFM@title\empty\else\black\UFM@title\\\fi
48          \ifx\fromlocation\empty\else\black\fromlocation\\\fi
49          \ifx\fromaddress\empty\else\black\fromaddress\\\fi
50          \ifx\UFM@email\empty\else\black\UFM@email\\\fi
51          \ifx\UFM@url\empty\else\black\UFM@url\\\fi
52          \ifx\telephonenum\empty\else \black\telephonenum\\\fi
53 }
```

2.2   Printing the first page

\opening The command \opening{⟨*greeting*⟩} specifies the printing of the letterhead and footer, the date, the inside address, and the . If you don't like the way those are done the changes would need to be made here; otherwise there should be no need to change this except to correct errors.

```
54  \renewcommand\opening[1]{%
```

\HEAD The letterhead, including the department address, is created here and saved in the box \HEAD to be used later. It is defined here, inside \opening is running, so that personal information from the letter file can be incorporated. The footer will be defined later, outside of the macro \opening, since nothing in it depends on the personal information in the letter file.

```
55  \newsavebox{\HEAD}
56  \begin{lrbox}{\HEAD}%
57    \begin{minipage}[t]{\textwidth}%
58      \hspace*{\logoindent}
59      \includegraphics[width=2.5in]{UFsignature}
```

```
60        \\[0.5cm]
61        \UFMunitnames
62        \hskip\fill
63        \UFMreturnaddress
64    \end{minipage}%
65    \end{lrbox}
66
```

\ps@firstpage   The printing of the header and footer is done by the new pagestyle `firstpage` invoked here. This technique is taken from the standard letterclass.

```
67      \thispagestyle{firstpage}
68
69  % Now we print the date, inside address, and greeting.
70  % \begin{macrocode}
71    \vspace*{.40in plus .00001fil}
72        \vspace{5mm}
73        \@date      %% end of personal information
74        \par
75        \vspace*{.1in plus .00001fil}
76        \toname\\
77        \toaddress
78
79        \vspace{2\parskip}
80        #1\par \nobreak
81    }                          %% end of \opening.
82
```

2.3 The footer, some parameters, and the logo

The package *graphix* is needed to load the UF Logo as an eps file.

```
83  \RequirePackage{graphicx}
84  \ifcolor\RequirePackage{color}\fi
85  \usepackage{url}
86
```

logoindent   The page parameters are set here. They are all standard LaTeX2e lengths except for `\logoindent`, which is the distance the logo sticks out to the left.

```
87  \newlength{\logoindent}
88  \setlength{\logoindent}{-.85in}
89
```

```
90  \setlength{\topmargin}{0pt}
91  \setlength\headheight{0pt}
92  \setlength\headsep{0pt}
93  \setlength{\textheight}{620pt}
94  \setlength\oddsidemargin{.25in}
95  \setlength\textwidth{6.65in}
96  \setlength\evensidemargin{\oddsidemargin}
```

`\PRIMARYUNITFNT`
`\DEPTNAMEFNT`
`\DEPTADDRFNT`
`\FOUNDATIONFNT`
`\OPPORTUNITYFNT`

The fonts used in the header and footer are defined here. They will not be affected by any font changes made by the user. These fonts, type sizes, and styles are taken from the university specification for printed letterhead paper.

```
97   \DeclareFixedFont{\PRIMARYUNITFNT}{OT1}{ppl}{b}{n}{10}
98   \DeclareFixedFont{\DEPTNAMEFNT}{OT1}{ppl}{m}{n}{10}
99   \DeclareFixedFont{\DEPTADDRFNT}{OT1}{ppl}{m}{n}{10}
100  \DeclareFixedFont{\FOUNDATIONFNT}{OT1}{ppl}{m}{it}{12}
101  \DeclareFixedFont{\OPPORTUNITYFNT}{OT1}{ppl}{m}{n}{7}%
102
```

`\blue`
`\black`

These are ignored for printing in black and white.

```
103  \ifcolor
104    \definecolor{UFblue}{rgb}{0,33,165}
105    \newcommand\blue{\color{UFblue}}
106    \newcommand\black{\color{black}}
107  \else
108    \let\blue\relax
109    \let\black\relax
110  \fi
```

`\FOOT`

Here we construct a box containing the footer. This cannot be changed by anything in the letter file (except options in the `\documentclass` command).

```
111 \newsavebox{\FOOT}
112 \begin{lrbox}{\FOOT}
113   \begin{minipage}[t]{\textwidth}
114     \blue
115     \ifnofoundation
116       \vspace*{14pt}
117     \else
118       \FOUNDATIONFNT
119       The Foundation for The Gator Nation
120     \fi
```

```
121
122    \OPPORTUNITYFNT
123    An Equal Opportunity Institution
124  \end{minipage}
125 \end{lrbox}
```

\ps@firstpage The first, letterhead, page of the letter is printed by use of the special page style `firstpage`. It simply adjusts some dimensions and then sets the head and foot to be the boxes previously created.

```
126 \renewcommand{\ps@firstpage}{%
127  \setlength{\topmargin}{-.375in}%         % 1 inch - .375 = 6.25 inch
128 % \enlargethispage{.5in}%
129  \setlength{\headheight}{1.875in}%
130  \setlength{\headheight}{\ht\HEAD}
131  \setlength\footskip{.75in}%
132  \setlength{\headsep}{0in}%
133  \setlength{\textheight}{7.5in}%
134  \renewcommand{\@oddhead}{\usebox{\HEAD}}%
135  \renewcommand{\@oddfoot}{\usebox{\FOOT}}%
136  \renewcommand{\@evenhead}{}%
137  \renewcommand{\@evenfoot}{}%
138 }                                %% end of \ps@firstpage
```

\closing This would be it, except that the later style file puts the closing and signature in the middle of the page. This puts it flush left, but otherwise is the same.

```
139 \renewcommand{\closing}[1]{\par\nobreak\vspace{\parskip}%
140  \stopbreaks
141  \noindent
142  \parbox{\indentedwidth}{\raggedright
143      \ignorespaces #1\\[6\medskipamount]%
144      \ifx\@empty\fromsig
145          \fromname
146      \else \fromsig \fi\strut}%
147  \par}
```

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Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition;

numbers in roman refer to the code lines where the entry is used.

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