

Presentation using L<sup>A</sup>T<sub>E</sub>X

Latex Smart  
6356 Agricultural Road  
University of British Columbia  
Vancouver BC  
V6T 1Z2

February 26, 2003

## Outline

- The `seminar` document class and `fancybox` and `fancyhdr` package
- `Pdflatex` command and `geometry`, `hyperref` and `color` package
- The `foils` document class with the `FoilTeX` package
- Powerpoint-like flashy effects by using `ppower4`

To create a simple presentation document using  $\text{\LaTeX}$ , we can use the `seminar` class. The syntax is as follows:

```
\documentclass[landscape]{seminar}
...
\begin{document}
\begin{slide}
...
\newslide
...
\end{slide}
\begin{slide}
...
\newslide
...
\end{slide}
\end{document}
```

## Basics of Survival Analysis

Notations:

- $T$  = a random variable representing time to event (e.g. time to death),  $T > 0$
- pdf and cdf:  $f(t)$  and  $F(t)$
- survivor function:  $s(t) = 1 - F(t)$
- hazard function:  $h(t)$ , which is the probability that an individual dies at time  $t$ , given that he has survived to time  $t$ .
- relationship between  $h(t)$ ,  $f(t)$ ,  $s(t)$ :

$$h(t) = \frac{f(t)}{s(t)}$$

$$s(t) = \exp\left\{-\int_0^t h(u)du\right\}$$

$$\text{So } f(t) = h(t)\exp\left\{-\int_0^t h(u)du\right\}$$

```
\usepackage{fancybox}
```

```
\fbox fbox
```

```
\shadowbox shadowbox
```

```
\doublebox doublebox
```

```
\ovalbox ovalbox
```

```
\Ovalbox Ovalbox
```

```
\usepackage{fancyhdr}

• \pagestyle{fancy}

• \fancyhf{} % delete current setting for header and footer

• \lhead{left header}

• \chead{center header $\alpha$}

• \rhead{right header}

• \renewcommand{\headrulewidth}{0.5pt}

• \lfoot{left footer}

• \cfoot{center footer \thepage}

• \rfoot{right footer}

• \renewcommand{\footrulewidth}{0pt}
```

Alternatively, we can use

- `\pagestyle{fancy}`
- `\fancyhf{}` % delete current setting for header and footer
- `\fancyhead[L]{left header}`
- `\fancyhead[C]{center header  $\alpha$ }`
- `\fancyhead[R]{right header}`
- `\renewcommand{\headrulewidth}{0.5pt}`
- `\fancyfoot[L]{left footer}`
- `\fancyfoot[C]{center footer \thepage}`
- `\fancyfoot[R]{right footer}`
- `\renewcommand{\footrulewidth}{0pt}`

For double-sided documents, we can use combined options.

For example, `\fancyhead[RE, LO]{\thepage}` means to place the page number in the right field of the header on even (left) pages and in the right field of the header on odd (right) pages.

E	Even page
O	Odd page
L	Left
C	Center
R	Right
H	Header
F	Footer



## PDFLaTeX

- PDFLaTeX is a version of  $\text{\LaTeX}$  that generates PDF output
- PDF is a near-universal format
- PDF file can be “full-screen” displayed
- PDF has a number of advanced features — special display effects, hyperlinks, and so forth

Syntax

pdflatex filename.tex