

# Locally Developed H&SS L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> Styles

**kcb** *et al.*

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# 1 The **hsswp** document class

This document class is an extension of the **article** class and is used to produce Caltech Social Science and Humanities Working Papers. It is invoked by either

```
\documentclass[ss]{hsswp}
\documentclass[hum]{hsswp}
```

It is designed to provide a uniform look and feel to all working papers, especially their covers. Consequently *it is intentionally extremely difficult to change the appearance and style of the cover page*. Do not ask how to get some special effect, such as small caps or lowercase letters in the title—I shall not tell you.

There are three new user commands defined by this class, `\wpno`, `\JEL`, and `\keywords`. The `\wpno` is required. It is used to produce the working paper number, e.g., `\wpno{923}`. Remember to get the number from the Working Paper coordinator, Victoria Mason.

The `\JEL` and `\keywords` are optional. They are used to input the *Journal of Economic Literature* classification numbers, and the key word list, both of which appear on the abstract page. For instance, `\JEL{21, 22}` and `\keywords{decision theory, Choquet capacity}`.

The required commands `\title`, `\author`, `\wpno`, and the optional commands `\date`, `\JEL`, `\keywords`, `\begin{abstract}`, and `\end{abstract}` *must appear before* the `\maketitle` command. The `\JEL` and `\keywords` commands do *not* go inside the abstract environment.

The default date is properly formatted. If you use an explicit `\date` command, use only the month and year with no comma, e.g., `\date{April 1995}`.

The **hsswp** document class accepts four options. The **ss** option produces a Social Science Working Paper and the **hum** option produces a Humanities Working Paper. *If neither option is specified, the **ss** option is assumed.* The **cover** option produces only a cover page. Use either of

```
\documentclass[ss,cover]{hsswp}
\documentclass[hum,cover]{hsswp}
```

The **chapters** option extends the **report** class, so `\chapter` commands are allowed.

## 1.1 Formatting the authors

Here is the preferred way to format the list of authors. First, make sure you use the `\and` command to separate multiple authors. When all the authors are solely affiliated with Caltech there is no need to give their affiliation. When the author is a visitor, or when there are multiple authors not all of whom are affiliated with Caltech, then you should list an affiliation. To do this use the `\\` command to place the affiliation on a line below the author's name. For example,

```
\author{Matthew Spitzer\thanks{Thanks to the Olin Foundation for support.}\\
Caltech and USC
\and
Tom Palfrey\thanks{Thanks to the NSF for support.}\\Caltech
\and
Paul Brewer\thanks{Thanks to the Pacific Coast Stock Exchange for support.}\\
Georgia State University}
```

Note the placement of the `\thanks` commands. They go on the same line as the authors' names, not their affiliations.

By the way, the output of any `\thanks` commands does *not* appear on the cover page or the abstract page. It will appear on the first page of the paper. Some of you may like to use the `\thanks` command to list the authors' affiliations. If you do this, the affiliations will not appear on the cover page. If you want to do this, note that you may use the `\protect\footnotemark` command when the affiliations are repeated. For example,

```
\author{David Grether\thanks{Caltech}  
\and  
R. Mark Isaac\thanks{University of Arizona}  
\and  
Charles Plott\protect\footnotemark[1]  
}
```

will cause Grether and Plott to have the same footnote symbol, assuming that there is no `\thanks` command on the title. If there is, then use `\footnotemark[2]`. Again, none of this will show up on the cover page.

## 2 The **hssvita** document class

This class extends the **article** class and is used to produce a curriculum vitae for the Division Chairman and his henchmen. I recommend the appendix on vitae from *A Handbook for Scholars* by Mary-Claire van Leunen for advice on how to prepare a cv. It recommends the following sections in the following order (blank sections should be omitted): Degrees, Additional education, Experience, Honors, Grants, Memberships (optional, depends on field), Personal information, Publications. Graduate students will probably want to have a section for personal references. Use the **references** environment for that.

I recommend typesetting your vita in the following point sizes: **12pt** for Assistant Professors and graduate students, **11pt** for Associate Professors, **10pt** for Professors (only half joking).

The **hssvita** class defines three commands, `\Name`, `\HomeAddress`, and `\BusinessAddress`, which are used to insert the appropriate information. If you are on the job market, you may want to give the placement secretary's phone number, and be sure to include your home phone number. Lines in the addresses should, as usual, be separated by `\\`

Each entry on the vita is simply typed as a separate paragraph with no special commands.

The class defines three new environments.

The most important environment is the **Vita** environment, which encloses the vita itself. *The entire content of the vita should be enclosed* between `\begin{Vita}` and `\end{Vita}`. This environment formats your name and addresses and places the date at the end. Note that the `\Name`, `\BusinessAddress`, and `\HomeAddress` commands must come *before* the `\begin{Vita}` command.

There is also the **BlockPar** environment, which produces block paragraphs instead of hanging indentation; and the **references** environment, which is used if you want to include the names and addresses of personal references. It works much like the `\author` command.

The best way to explain how to use **hssvita** is by example. The result of the following input is illustrated in Figure 1.

```
\documentclass[10pt]{hssvita}
\nofiles

\begin{document}

\Name{J.~Random Student}

\BusinessAddress{Division of the Humanities and Social Sciences\\
California Institute of Technology\\
Pasadena, CA 91125\\
818 395-4206\\
jrstudent@hss.caltech.edu}

\HomeAddress{1200 E. California Blvd.\\
Pasadena, CA 91106\\
818 855-1212}

\begin{Vita}

\section{Degrees}
```

BS 2009, California Institute of Technology.\\  
PhD, expected June 2012.

\section{Experience}

California Institute of Technology. Graduate Research Assistant,  
2010--20011.\\  
Graduate Teaching Assistant, since 2011.

\section{Publications}

A hitchhiker's guide to Infinite Dimensional Analysis:  
An experimental inquiry,  
Caltech Social Science Working Paper 2007, December 2010.

\Ibid Revised as A hitchhiker's guide to Infinite Dimensional Analysis:  
An experimental inquiry,  
Caltech Social Science Working Paper 2007R, January 2011.

\section{Notes on the vita style}

\begin{BlockPar}

This is a sample highly abridged vita. It is only here to  
illustrate how to use the hssvita class. Following this  
paragraph are some abridged personal references.

\end{BlockPar}

\begin{References}

J.~Morgan Kousser\\  
Division of the Humanities and Social Sciences\\  
California Institute of Technology\\  
Pasadena, CA 91125

\and

Peter C. Ordeshook\\  
Division of the Humanities and Social Sciences\\  
California Institute of Technology\\  
Pasadena, CA 91125

\end{References}

\end{Vita}

\end{document}

## J. Random Student

Division of the Humanities and Social Sciences  
California Institute of Technology  
Pasadena, CA 91125  
818 395-4206  
jrstudent@hss.caltech.edu

Home:  
1200 E. California Blvd.  
Pasadena, CA 91106  
818 855-1212

### Degrees

BS 2009, California Institute of Technology.  
PhD, expected June 2012.

### Experience

California Institute of Technology. Graduate Research Assistant, 2010-20011.  
Graduate Teaching Assistant, since 2011.

### Publications

A hitchhiker's guide to Infinite Dimensional Analysis: An experimental inquiry, Caltech Social Science Working Paper 2007, December 2010.

——— Revised as A hitchhiker's guide to Infinite Dimensional Analysis: An experimental inquiry, Caltech Social Science Working Paper 2007R, January 2011.

### Notes on the vita style

This is a sample highly abridged vita. It is only here to illustrate how to use the hssvita class. Following this paragraph are some abridged personal references.

### References

J. Morgan Kousser  
Division of the Humanities and  
Social Sciences  
California Institute of Technology  
Pasadena, CA 91125

Peter C. Ordeshook  
Division of the Humanities and  
Social Sciences  
California Institute of Technology  
Pasadena, CA 91125

July 2012

Figure 1: A sample vita produced by **hssvita** (70% scale).

Since a vita is a personal matter, after you have prepared a vita for the Chairman, there are several customization options. They include

**fancy** which uses decorative rules to give a B-school sort of look.

**justify** which right justifies the lines for the anal retentive among us. By default lines are set ragged right, since most vita entries do not break nicely.

**block** which makes block paragraphs instead of hanging.

**cv** which adds the rubric Curriculum Vitae at the top. van Leunen argues that this is unnecessary, since it can't be mistaken for anything else.

**stretch** which makes the vita a trifle bit longer by widening the margins a bit and increasing the spacing. I can't think of any reason to use it.

You may also `\renewcommand` various commands in the preamble to customize your vita.

- By default, the home address is prefaced by a line that says Home: You can redefine it with

```
\renewcommand{\HomeLabel}{\small Home:}\}
```

You can eliminate it with

```
\renewcommand{\HomeLabel}{}
```

- Similarly, there is a (blank by default) label for the office address:

```
\renewcommand{\OfficeLabel}{}
```

- If you use the **cv** class option, it prints `\CVLabel` at the top, which is by default:

```
\renewcommand{\CVLabel}{Curriculum Vitae}
```

- The `\ReferenceLabel` command is used as the section heading for the **references** environment. By default it is:

```
\renewcommand{\ReferenceLabel}{References}
```

The length `\ReferenceWidth` is the default width of each reference. By default it is

```
\setlength{\ReferenceWidth}{.45\textwidth}
```

which allows for two references across the page.

If you want other options, send mail to kcb and they might appear.

Full documentation appears at:

<http://www.hss.caltech.edu/~kcb/TeX/hss/hssvita-Documentation.pdf>.



### 3 The **hssmemo** document class

This class extends the **letter** class and is used for memos (duh). Again, a sample is all you need. See Figure 2 for the result.

```
\documentclass{hssmemo}

\paperheight 6in
\textheight 5in
\oddsidemargin -1in

\begin{document}

\memofrom{KC Border}
\mail{228-77}\phone{4218}\email{kcb@hss}
\memoto{\TeX\ users}
\subject{The \emph{Local Guide}}

\begin{memo}

There is once again a rudimentary \emph{Local Guide}
for \LaTeX\ in the division.

\encl{\emph{Local Guide}}
\cc{The Chairman}

\distribution{Victoria Mason\\
Eloisa Imel}

\end{memo}

\end{document}
```

The `\email` part of the header is optional. In addition to the standard **letter** commands `\encl` and `\cc`, **hssmemo** defines a new command `\distribution` for printing a distribution list. It also offers the `\numdates` declaration to format a date like 4-26-95.



MEMORANDUM  
CALIFORNIA INSTITUTE OF TECHNOLOGY  
Division of the Humanities and Social Sciences

**TO**           T<sub>E</sub>X users

**FROM**       KC Border

**DATE**       October 20, 2011

**E-MAIL**       kcb@hss

**MAIL CODE**   228-77

**EXT**           4218

**SUBJECT**   The *Local Guide*

There is once again a rudimentary *Local Guide* for L<sup>A</sup>T<sub>E</sub>X in the division.

encl: *Local Guide*

cc: The Chairman

**Distribution:**  
Victoria Mason  
Eloisa Imel

Figure 2: A sample memo.

## 4 The **hssletter** document class

This class extends the **letter** class and is used for letters. The main thing it does is add headings on pages after the first page. In 2005, some new options were added:

**watermark** This option adds a Caltech logo “watermark” to the pages. You will need the `watermark1.pdf` file.

**letterhead** This option simulates Caltech letterhead for the first page.

**Baxter** This option sets the mail code for the **letterhead** option to 228-77. This is the default.

**Dabney** This option sets the mail code for the **letterhead** option to 101-40.

The package also defines these user commands:

`\signatureheight` This length controls the amount of space left for the signature. Default is `\setlength{\signatureheight}{24pt}`.

`\SignatureFile` The command `\SignatureFile{filename}` uses the named graphics file to insert a scanned signature (or other graphic).

`\ReturnAddressBox` Use this to set the return address. Use `\\` to separate lines.

You are less likely to need these. They control the letterhead page.

`\MailCode` Sets the mail code in case the **Dabney** option is not enough. Default is `\MailCode{228-77}`.

`\HeadI` Default is `\HeadI{CALIFORNIA INSTITUTE OF TECHNOLOGY}`.

`\HeadII` Default is `\HeadII{DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES\quad \@mailcode}`.

`\Foot` The footer on the first page. Default is `\Foot{\ifthenelse{\boolean{letterhead}}{PASADENA, CALIFORNIA 91125}{\ifthenelse{\boolean{baxter}}{-7700}{}}}`.

`\Watermark` This names the watermark graphics file. Default is `\Watermark{watermark1}`.

Here is a sample letter. Figure 3 shows the result.

```
\documentclass[letterhead,watermark]{hssletter}
\nofiles

\SignatureFile{KimCBorderSignature.jpg}

\ReturnAddressBox{Kim C. Border\\
Professor of Economics}

\signature{Kim C. Border\\
Professor of Economics\\[12pt]
e-mail: kcborder@caltech.edu\\
phone: 626 395-4218}

\begin{document}
\begin{letter}{Federico Echenique\\
Caltech
```

```
}  
  
\opening{To whom it may concern:}  
  
El que se quema con leche, ve una vaca y llora.  
  
\clearpage  
%  
%This page 2.  
  
\closing{Sincerely,}  
  
\end{letter}  
\end{document}
```

# CALIFORNIA INSTITUTE OF TECHNOLOGY

DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES 228-77

Kim C. Border  
Professor of Economics

July 13, 2012

Federico Echenique  
Caltech

To whom it may concern:

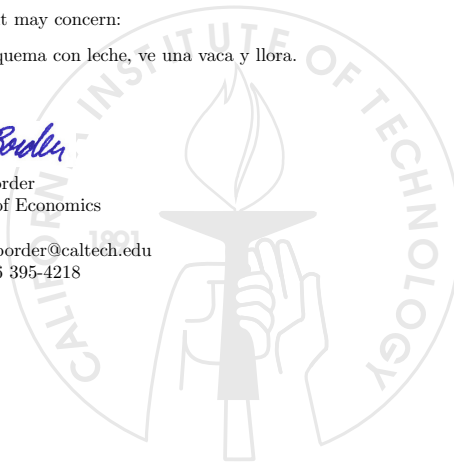
El que se quema con leche, ve una vaca y llora.

Sincerely,



Kim C. Border  
Professor of Economics

e-mail: [kcborder@caltech.edu](mailto:kcborder@caltech.edu)  
phone: 626 395-4218



PASADENA, CALIFORNIA 91125

Figure 3: Sample letter (70% scale).

## 5 The `hssthm` package

The `hssthm` package defines a number of environments using the `\newtheorem` command. It replaces the obsolete local styles `theorems.sty`, `mtheorems.sty`, and `thminsec.sty`. You could of course define these environments yourself, but this packages saves you the work. In addition to the `theorem` environment, it also defines `assumption`, `claim`, `conjecture`, `corollary`, `definition`, `example`, `exercise`, `fact`, `lemma`, `proof`, `proposition`, `remark`, `result`, and `solution`. Most of these produce an appropriately numbered bold heading, followed by the optional bracketed argument in parentheses, and the text of the body of the environment in italics. A few do not.

By default, all numbered environments share the same counter. Thus you may have **Definition 1**, **Theorem 2**, **Corollary 3**. The reason for this is that it makes it easier to find **Theorem 32** when you are at **Definition 26**. (You know that it comes later.)

While I do not recommend using it, the `separate` option numbers each environment separately. The `bysection` option numbers each environment within sections. The `numfirst` option places the numbers before the labels. These options may be freely mixed.

The `proof` environment is not numbered and sets its text in the normal upright font. The text is prefaced by *Proof*: and followed by a right-justified solid rectangle, `{\goldenrectangle}`. The rectangle can be replaced by a symbol of your choice by renewing the `\qedmark` command. For instance, `\renewcommand{\qedmark}{Q.E.D.}` makes the phrase Q.E.D. the end-of-proof marker. The proof environment accepts an optional argument that *replaces* the word *Proof* (but not the colon). Thus

```
\begin{proof}[Proof of the Pythagorean Theorem]
Obvious.
\end{proof}
```

produces:

*Proof of the Pythagorean Theorem*: Obvious. ■

The `solution` environment is the same as the `proof` except that *Proof* is replaced by *Solution* and `\solutionmark` replaces `\qedmark`.

The `example` environment is numbered, but also sets its text in the normal upright font. It is prefaced by **Example** and a number, and followed by a right-justified triangle. The triangle can be replaced by a symbol of your choice by renewing the `\examplemark` command.

**Example 1 (Example of an example)** This is a sample example. □

The `result` environment is used for named theorems. For example

```
\begin{result}[Pythagorean Theorem]
$a^2+b^2=c^2$.
\end{result}
```

produces

**Pythagorean Theorem**  $a^2 + b^2 = c^2$ .

whereas

```
\begin{theorem}[Pythagorean Theorem]
$a^2+b^2=c^2$.
\end{theorem}
```

produces

**Theorem 2 (Pythagorean Theorem)**  $a^2 + b^2 = c^2$ .

Named theorems are not numbered, unless the **numfirst** option is specified. Then the numbers used by the **result** environment are taken from the **theorem** counter. Omitting the bracketed optional argument produces the default label **Theorem**.

## 6 The `cit_thesis` document class

The **cit\_thesis** document class formats a thesis or dissertation according to the rules specified in the *Caltech Regulations for Format and Presentation of Theses*. It is written by Michael Kelsey of High Energy Physics, and was downloaded from

`<ftp://ftp.caltech.edu/pub/dissertation/cit_thesis.tar.Z>`

A skeleton thesis may be found in `cit_thesis_sample2e.tex`. The documentation may be found in the (non- $\text{\TeX}$ ) file `cit_thesis_doc`. I have not tested it.

## 7 Miscellaneous packages

There are other miscellaneous local packages. Remember package files have a **sty** extension. These files are mostly self documenting. Some of the more useful ones are described below.

**hss** combines **hsstitle** and **widetext**.

**hsstitle** redefines the `\maketitle` command so that it may come either before or after the abstract. It creates a separate title page, which has all the `\thanks` on it. It also repeats the title and authors (without any `\thanks`) on the first page of the paper. If `\maketitle` appears before the abstract, then the abstract is dealt with in the usual way. If it appears after the abstract, the abstract appears on its own page. Finally, if there is a `\tableofcontents` command before `\maketitle`, it prints the table of contents on a separate page immediately after the title page, but before the abstract. If `\tableofcontents` appears after `\maketitle`, it behaves in the usual fashion. I haven't bothered to deal with `\listoftables` or `\listoffigures`, but I will on request.

**widetext** makes narrow margins with lines that are too long to read efficiently, but it saves paper.

Remember that in  $\text{\LaTeX}$  2 $\epsilon$ , packages are invoked with the `\usepackage` command, e.g., `\usepackage{widetext,ragged,timestamp}`.

## 8 Local $\text{\BIBTeX}$ styles

A few locally produced bibliography styles may be found. They include:

**chicagob.bst** is used for author-date style of citations based on *The Chicago Manual of Style*. It requires the **authdate** package. For various reasons the file `authdate.sty` is linked to the file `chicagob.sty`.

**chicagon.bst** is a numbered bibliography style based on *The Chicago Manual of Style*. It requires no special packages.

**econometrica.bst** formats a bibliography according to the quaint *Econometrica* format, and requires the standard **harvard** package and the local **em-cite.sty** package.

**jet.bst** formats a bibliography according to the *Journal of Economic Theory* format, and requires no special package.