

sshrc-insight: A L^AT_EX class for SSHRC Insight Grant proposals*

Tristan Miller
Department of Computer Science
University of Manitoba
Tristan.Miller@umanitoba.ca

October 21, 2024

Contents

1	Introduction	2
2	Usage	2
2.1	Main document	3
2.1.1	Preamble	3
2.1.2	Document body	4
2.2	Subfiles	4
2.2.1	Preamble	4
2.2.2	Document body	5
2.3	Bibliographic references and research contributions	5
2.3.1	Citation numbering	6
2.3.2	Hyperlinks	6
2.3.3	Marking student authors	6
2.3.4	Marking SSHRC-supported research contributions	7
2.4	Localization	7
3	Class development	7
3.1	Source repository and bug tracker	7
3.2	Versioning scheme	7
3.3	Version history	8
4	Disclaimer	8
A	Implementation	8

*This document corresponds to sshrc-insight v2024.1.0, dated 2024-10-21. See §3.2 for an explanation of the versioning scheme.

1 Introduction

This document describes the usage of `sshrc-insight`, a \LaTeX class and template that facilitate the preparation of funding proposals for the Insight Grants¹ program of Canada’s Social Sciences and Humanities Research Council (SSHRC). SSHRC requires these proposals to be submitted through an online application form that consists of various short- and long-answer fields, as well as file submission fields where the applicant must attach various PDF documents structured and formatted according to certain specifications. `sshrc-insight` allows you to compose the long-answer fields and PDF documents with \LaTeX , $X_{\text{q}}\LaTeX$, or $\text{Lua}\LaTeX$, with the following principal benefits:

- Formats the PDF documents according to the SSHRC’s specifications.
- Allows parts of the proposal to be compiled into separate PDFs to attach to the appropriate places in the online application form.
- Alternatively, allows the proposal to be compiled into a single PDF in order to facilitate the writing and pre-submission reviewing process.
- Ensures that citation numbering remains consistent regardless whether the proposal is compiled as separate PDFs or a single PDF.
- Provides character counts for long-answer form fields.
- Supports preparation of proposals in either English or French.

The current version of `sshrc-insight` structures and formats proposals according to SSHRC’s 2024 call. It is expected that future versions of the class will support the structure and format of future calls, while maintaining backward compatibility.

2 Usage

SSHRC provides instructions for structuring and formatting the PDF documents to attach to the online application form. Since form and content cannot be entirely separated, the best way of starting a new proposal is to make a copy of the template proposal distributed with this class and then adapt it to your project. This template includes the following files:

- `budget_justification.tex`
- `career_interruptions.tex`
- `detailed_description.tex`
- `exclusion_of_potential_reviewers.tex`
- `expected_outcomes.tex`
- `knowledge_mobilization_plan.tex`
- `list_of_references.tex`

¹https://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/insight_grants-subventions_savoir-eng.aspx

- `multi-interdisciplinary_evaluation.tex`
- `previous_critiques.tex`
- `research_contributions.tex`
- `research-creation_support_material.tex`
- `research_team.tex`
- `summary.tex`
- `insight_proposal.tex`
- `insight_proposal.bib`

The `insight_proposal.tex` file is the *main document*. Compile this file to get a complete draft of your proposal (minus the short-answer fields from the online application form) in a single PDF, including a table of contents. This makes it convenient for you (and anyone helping you review your proposal before submission) to read all the long-form proposal text.

The complete proposal is generated from the other `.tex` files—the *subfiles*—which are the individual documents and long-answer form fields to be attached to or copied into the online application form. They can be compiled separately for when you want to work on one part of the proposal at a time, or for when you are ready to attach the individual PDFs to the online application form.

The file `insight_proposal.bib` is a sample bibliography demonstrating sshrc-insight’s features for marking publications according to the application instructions—see §2.3 for further details.

The following two subsections describe the structure of the main document and subfiles, as well as the various macros and environments provided by sshrc-insight.

2.1 Main document

2.1.1 Preamble

Your main proposal document should begin with the following line:

```
\documentclass{sshrc-insight}[=2024]
```

The optional argument, `=2024`, indicates that the class should use the specifications from SSHRC’s 2024 call for proposals. At present, the only supported specification year is 2024, though future versions of this class may support specifications for future years’ calls. The class will use the most recent supported specification in the event that you omit the optional argument; however, this is not recommended because if you later upgrade sshrc-insight to a version that supports a later specification year, re-compiling your old proposal may result in compilation errors, or incorrect or unexpected formatting.

The `sshrc-insight` class is based on the default L^AT_EX `article` class, so (with a few modifications and exceptions documented below) all of the macros and environments from the latter are available for you to use.

The class automatically sets the page size and margins mandated by the official application instructions. If compiling with X_YL^AT_EX or LuaL^AT_EX, the class sets the font to Times New Roman, which you are expected to have installed on your

system. If compiling with pdfL^AT_EX, the class uses the free Times clone provided by the newtxtext and newtxmath packages. (Although this is not strictly in accordance with the application instructions, this is unlikely to cause any problems with the funding agency, since the font metrics are virtually identical to the proprietary Times New Roman.)

Following `\documentclass` you can include whatever L^AT_EX packages and macros you wish; these will apply to both the main document and the subfiles. The template proposal includes some sensible defaults that set the document language and the behaviour and appearance of hyperlinks, section headings, and lists, though you are free to remove or adjust these to taste. (In particular, you may wish to use the titlesec package to further reduce the size of and spacing around section headings.) The template also sets up the bibliographic referencing and citation system to use biblatex and Biber, for which sshrc-insight has built-in support. (See §2.3 for further details.)

You should then provide the proposal metadata using the `\title` macro, and optionally also the `\author` and `\date` macros, which behave as they do in the `article` class.

2.1.2 Document body

As in the `article` class, the main body of the document must be placed in the `document` environment.

`\maketitle` These are generally the first macros that should be called in the main body of the document. As with the standard `article` class, they typeset the title and table of contents.

`\subfile` This macro is used to include the subfiles in the main document; it takes the subfile’s filename (optionally excluding the `.tex` extension) as its sole argument. Each subfile corresponds to a long-answer field that must be filled in the online application form, or a document that must be attached as a PDF to the online application form. The template proposal includes a list of `\subfile` commands (as well as the corresponding template files) for fields and documents that are required by most or all proposals; you should comment out or remove any entries that do not apply to your proposal.

You may also wish to include among the `\subfile` commands further information or documents that you will be submitting in the application form. For externally generated PDFs, such as a STRAC attestation form, you may wish to do this via the `pdfpages` package’s `\includepdf` command. Here is an example of how you can do this and have the file appear in the table of contents:

```
\includepdf[
  pages=-,
  addtotoc={1,section,1,STRAC Attestation,STRAC}
]{attestation}
```

2.2 Subfiles

2.2.1 Preamble

Each subfile must start with the following line:

```
\documentclass[{filename}]{subfiles}
```

Here $\langle filename \rangle$ must be the filename (*without* the `.tex` extension) of the main document.

The preamble of the subfiles should normally be empty; if you need to import any packages or define any macros, this should be done instead in the preamble of the main document.

2.2.2 Document body

- `\subfiletitle` In subfiles, this macro should be used in place of the standard `\maketitle` macro. It takes as its sole argument the title of the subfile. It prints this title, in a relatively compact format, at the top of the first page of the subfile, and also adds the title to the table of contents of the main document. If using the `hyperref` package, the title will also appear in the PDF metadata when the subfile is compiled as a separate file. As described in §2.4, English titles that exactly match those specified in the official application instructions will be automatically localized into French when the document language is set to `french`.
- `\subfilesection` These two macros can be used to print an unnumbered (sub)section heading in a subfile. They function identically to the `article` class's `\section*` and `\subsection*` except that the arguments are automatically localized, as they are with `\subfiletitle`.
- `\subfilessubsection`
- `\countchars` This macro can be used for writing long-answer form data, such as the proposal summary and the response to previous critiques. Its principal benefit is that, in addition to printing the answer text, it outputs its total character count, thereby helping you keep your text within the length limit specified in the application form. The macro takes one mandatory argument, which is the text of the answer, and one optional argument, which is the field's length limit in characters:

$$\text{\countchars}[\langle length \rangle]\{\langle text \rangle\}$$

If the length limit is not specified, it defaults to 3800, which is the limit for all long-answer fields in the 2024 application form.

Note that the PDF output of `\countchars` is not intended to be used as-is in your final application. Rather, you should copy and paste its text argument directly from the L^AT_EX source code into the online application form. For this reason, please ensure that you write the argument as plain text rather than as L^AT_EX markup.

2.3 Bibliographic references and research contributions

It is recommended to use `bibtex` and `Biber` for your bibliographic references and citations, and the template proposal assumes that this is how you have things set up. Put all your `bibtex` configuration, and all your `\addbibresource` macros, in your main document. You can then use the usual `bibtex` commands for citing references and printing bibliographies in the subfiles. The `list_of_references.tex` file of the template proposal gives an example of how to print a master bibliography for citations across the various subfiles, and the `research_contributions.tex` file shows how to print self-contained bibliographies for one's own research contributions, broken down according to the categories specified in the application instructions.

2.3.1 Citation numbering

When using `bibtex` as described above, `sshrc-insight` ensures that the numbering of the citations is consistent regardless whether you compile the main proposal file or the individual subfiles. It does this by having the subfiles read in the main document’s Biber-generated `.bb1` file when the subfiles are compiled individually. For this reason, it is important that, whenever you add, change, or remove citations and references, you (re)compile the main document *before* you (re)compile the subfiles. It also means that, despite log messages to the contrary, you never need to run Biber on the subfiles.

2.3.2 Hyperlinks

When `bibtex` is used in conjunction with `hyperref`, it hyperlinks each citation to the corresponding entry in the list of references. While this works well when compiling the main document into a single PDF, when compiling the subfiles individually, there is no list of references to link to (since the list of references is itself one of the subfiles). For this reason, `sshrc-insight` automatically disables `bibtex`’s hyperlinks when compiling the subfiles individually.

2.3.3 Marking student authors

The official application instructions for the “Research Contributions” document indicate that student authors should be identified with a plus sign. `sshrc-insight` takes care of this when printing bibliographic references by means of a `bibtex` data annotation, `student`. To use this feature, simply add a `BIBTEX` field in the following format to any entry with a student author:

```
author+an = {<n>=student [ ;<n>=student ] ... },
```

where each `<n>` is the position of a student in the author list. For example, the `BIBTEX` entry

```
@article{art1,
  author   = {Ferenc Farkas and Lili Lakatos and Fruzsina Fekete},
  author+an = {1=student;3=student},
  title    = {A new approach to underwater basket-weaving},
  journal  = {Journal of Underwater Basket-weaving},
  pages    = {107--113},
  year     = 2024,
}
```

will be formatted in the reference lists as follows (modulo whatever bibliography styles you may have applied):

Ferenc Farkas⁺, Lili Lakatos, and Fruzsina Fekete⁺. “A new approach to underwater basket-weaving”. In: *Journal of Underwater Basket-weaving* (2024), pp. 107–113.

Note that student authors will be marked not just in the reference lists but also in the citations: a citation to the entry above might appear as “(Farkas⁺ et al., 2024)”.

`\sshrcstudent` Outside bibliographies, the `\sshrcstudent` macro can be used for the same effect; it simply outputs a superscripted plus sign.

2.3.4 Marking SSHRC-supported research contributions

The official application instructions for the “Research Contributions” document indicate that research contributions resulting from previous SSHRC support should be identified with an asterisk in the left margin. `sshrc-insight` takes care of this when printing bibliographic references by means of a `biblatex` keyword, `sshrc`. To use this feature, simply add the following `BIBTEX` field to any entry that resulted from previous SSHRC support:

```
keywords = {sshrc},
```

(If the entry already contains a `keywords` field, you can simply add `sshrc` to its list of values, which are normally separated with commas.) For example, the `BIBTEX` entry

```
@article{art2,  
  author   = {Lili Lakatos},  
  title    = {An old approach to underwater basket-weaving},  
  journal  = {Journal of Underwater Basket-weaving},  
  pages    = {21--35},  
  year     = 2021,  
  keywords = {sshrc},  
}
```

will be formatted in the reference lists as follows (modulo whatever bibliography styles you may have applied):

```
* Lili Lakatos. “An old approach to underwater basket-weaving”. In:  
  Journal of Underwater Basket-weaving (2021), pp. 21–35.
```

`\sshrcsupported` Outside bibliographies, the `\sshrcsupported` macro can be used for the same effect; it simply outputs an asterisk in the left margin.

2.4 Localization

`sshrc-insight` supports preparation of proposals in either English or French. Although the document and section titles used by the template proposal are in English, setting the document language to `french` (via the `babel` or `polyglossia` packages) will automatically substitute these with the French equivalents in the PDF output.

3 Class development

3.1 Source repository and bug tracker

For now, the class’s source code is hosted on GitHub at <https://github.com/logological/sshrc-insight>. There you will also find an issue tracker for reporting bugs and feature requests.

3.2 Versioning scheme

Each release of the `sshrc-insight` class carries a version number in the format `year.maj.min`. Here `year` is the latest year of SSHRC’s call for proposals whose application specifications are implemented by the class, and `maj` and `min` represent,

respectively, major and minor revisions to the class (including any ancillary files, such as the template proposal and documentation). A major revision is one that includes potentially breaking changes or significant new features; minor revisions are for all other changes. As documented in §2.1.1, the class provides a mechanism that preserves compatibility with earlier versions of the application specifications.

3.3 Version history

v2024.1.0 (2024-10-21) Added support for marking research contributions according to the official application instructions.

v2024.0.1 (2024-10-17) Refactored files for CTAN.

v2024.0.0 (2024-10-16) Initial release.

4 Disclaimer

The `sshrc-insight` class is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. (See the L^AT_EX Project Public License for further details.) In particular, users should understand that the `sshrc-insight` proposal template is wholly unofficial, and its author(s) accept no responsibility for any omissions, errors, or discrepancies with respect to the requirements set forth in the official SSHRC application form, application instructions, and associated documentation. If you produce a proposal with this template, then you alone are responsible for ensuring that it matches all the official requirements before submitting it to the funding body.

A Implementation

Basic setup

Import the `article` class and define some conditionals for detecting the typesetting engine.

```
1 \LoadClass[12pt,letterpaper]{article}
2
3 %% Conditionals for detecting the typesetting engine
4 \RequirePackage{ifxetex,ifluatex}
5 \newif\ifxetexorluatex
6 \ifxetex
7   \xetexorluatextrue
8 \else
9   \ifluatex
10    \xetexorluatextrue
11  \else
12    \xetexorluatexfalse
13 \fi
14 \fi
15
```


The `subfiles` package is what allows a proposal to be compiled either into a single PDF or into separate files for each part. It takes care of most of the work, though later on we need to apply our own extensions.

```
16 \RequirePackage{subfiles}
```

Font setup

If compiling with `LuaATEX` or `XYLATEX`, configure `fontspec` to use Times New Roman, which is the font specified in the official application instructions. If compiling with `pdfLATEX`, use the Times clone provided by `newtxtext` and `newtxmath`.

```
17 \ifxetexorluatex
18 \RequirePackage{fontspec}
19 \defaultfontfeatures{Mapping=tex-text}
20 \setromanfont{Times New Roman}
21 \else
22 \RequirePackage[T1]{fontenc} % T1 font encoding
23 \RequirePackage{newtxtext} % Use Times for main text
24 \RequirePackage{newtxmath} % Use Times for math
25 \fi
```

Basic page layout, titles, and headings

Set the page size and margins and disable page numbers.

```
26 \RequirePackage[letterpaper,
27     left=0.75in,
28     top=0.75in,
29     bottom=0.75in,
30     right=0.75in,
31     ]{geometry}
32 \RequirePackage{nopageno} % No page numbers
```

Compactly format the titles for the individual parts of the proposal, and add them as unnumbered entries to the main document's table of contents.

```
33 %% Compact title for subfiles
34 \RequirePackage[normalem]{ulem}
35 \NewDocumentCommand{\subfiletitle}
36 {m}
37 {%
38 \newpage
39 \ifSubfilesClassLoaded{
40     \@ifpackageloaded{hyperref}
41     {\hypersetup{pdftitle=\GetTranslation{#1}}}
42     {}
43 }
44 {\phantomsection\addcontentsline{toc}{section}{\GetTranslation{#1}}}
45 \begingroup
46 \centering\bfseries\MakeUppercase{\uline{\GetTranslation{#1}}}
47 \par
48 \vskip 1.5em%
49 \endgroup
50 \par\@afterindentfalse\@afterheading
51 }
```

```

52
53 %% Suppress section numbers in table of contents
54 \addtocontents{toc}{\protect\renewcommand{\protect\numberline}[1]{}}
55
56 %% Localized (sub)section headings
57 \NewDocumentCommand{\subfilesection}
58 {m}
59 {\section*{\GetTranslation{#1}}}
60 \NewDocumentCommand{\subfilessubsection}
61 {m}
62 {\subsection*{\GetTranslation{#1}}}

```

Provide a mechanism for counting the number of characters in the long-answer form fields so that we know when we've reached the character limit specified in the official application instructions.

```

63 %% Count characters, adapted from code by Steven B. Segletes at
64 %% https://tex.stackexchange.com/a/587567/22603
65 \RequirePackage{tokcycle}[2021-03-10]
66 \RequirePackage{xcolor}
67 \newcounter{wordcount}
68 \newcounter{lettercount}
69 \newcounter{wordlimit}
70 \newif\ifinword
71 %% USER PARAMETERS
72 \newif\ifrunningcount
73 \newif\ifsummarycount
74 \def\limitcolor{red}
75 \setcounter{wordlimit}{0}
76 %%%
77 %% \tc@defx is like \def, but expands the replacement text once prior
78 %% to assignment
79 \newcommand\addtomacro[2]{\tc@defx#1{#1#2}}
80 \newcommand\changecolor[1]
81 {\tctestifx{.#1}{}\addcytoks{\color{#1}{}}}%
82 \tc@defx\currentcolor{#1}}
83 \newcommand\dumpword{%
84 \addcytoks[1]{\accumword}%
85 \ifinword\stepcounter{wordcount}\stepcounter{lettercount}
86 \ifrunningcount\addcytoks[x]{${\thewordcount,\thelettercount}$}\fi
87 \ifnum\thewordcount=\value{wordlimit}\relax%
88 \changecolor{\limitcolor}\fi
89 \fi%
90 \inwordfalse
91 \def\accumword{}}
92 \newcommand\addletter[1]{%
93 \stepcounter{lettercount}%
94 \tctestifcatx A#1{\inwordtrue}{\dumpword}%
95 \addtomacro\accumword{#1}}
96 \xtokcycleenvironment\countem
97 {\addletter{#1}}
98 {\dumpword\groupedcytoks{\processtoks{##1}}%
99 \dumpword\expandafter}\expandafter
100 \changecolor\expandafter{\currentcolor}}
101 {\dumpword\addcytoks{#1}}

```

```

102 {\dumpword\addcytoks{##1}}
103 {\stripgroupingtrue\def\accumword{}\def\currentcolor{.}
104   \setcounter{wordcount}{0}\setcounter{lettercount}{0}}
105 {\dumpword\ifsummarycount\tcafterenv{%
106   \par(Wordcount=\thewordcount, Lettercount=\thelettercount)}\fi}
107
108 \def\characterlimit{3800}
109 \newcommand{\countchars}[2][\characterlimit]
110   {\countem #2\endcountem\par\hfill
111   \GetTranslation{Character count:}
112   \thelettercount\ \GetTranslation{of} #1
113   }

```

A command for marking SSHRC-supported contributions (outside of bibliographies) with an asterisk in the left margin:

```

114 \reversemarginpar
115 \NewDocumentCommand{\sshrcsupported}
116   {}
117   {%
118   \leavevmode%
119   \marginparsep=0pt%
120   \marginpar{\raggedleft\mbox{\textasteriskcentered~}}%
121   }

```

Bibliography

A command for marking student authors in the bibliography (or elsewhere):

```

122 \NewDocumentCommand{\sshrcstudent}
123   {}
124   {\textsuperscript{+}}

```

If biblatex is used, we provide some convenient features.

```

125 \AtBeginDocument{
126   \@ifpackageloaded{biblatex}
127   {

```

To enforce consistency in the labelling/numbering of citations when the proposal is compiled into a single PDFs vs. multiple PDFs, use `biblatex-readbb1` to force subfiles to use the `bb1` file generated for the main file.

```

128   \ifSubfilesClassLoaded
129   {
130     % Force subfiles to read the main file's bibliography
131     \RequirePackage[bblfile=\preamble@file]{biblatex-readbb1}
132   }
133   {}

```

Provide a mechanism to mark student authors with a plus, per the official application instructions.

```

134   \renewcommand*{\mkbibnamefamily}[1]{%
135     \ifitemannotation{student}
136       {#1\sshrcstudent}
137       {#1}%
138   }

```

Provide a mechanism to mark previous SSHRC-supported contributions with an asterisk in the left margin, per the official application instructions.

```

139 \renewbibmacro*{begentry}
140   {%
141     \ifkeyword{sshrc}
142       {\makebox[0pt][r]{\textasteriskcentered~}}
143     }%
144   }
145 }
146 {}
147 }

```

When biblatex is used with hyperref, it hyperlinks each citation to the corresponding entry in the list of references. This is fine when compiling the proposal into a single PDF, but when compiling the proposal parts individually, there is no list of references to link to. So when compiling the subfiles individually, we disable the hyperlinks.

```

148 %% Disable citation hyperlinks in subfiles
149 \ifSubfilesClassLoaded{
150   \PassOptionsToPackage{hyperref=false}{biblatex}
151 }{}

```

Localizations

Provide French versions of the document titles and section headings specified in the application instructions, as well as a few other user-visible strings emitted by sshrc-insight.

```

152 %% Localizations
153 \RequirePackage{translations}
154 \DeclareTranslation{french}{1. Relevant research contributions over the last six years}
155 \DeclareTranslation{french}{2. Other research contributions}{2. Autres contributions à l'
156 \DeclareTranslation{french}{3. Most significant career research contributions}{3. Plus
157 \DeclareTranslation{french}{4. Contributions to training}{4. Contributions à la formati
158 \DeclareTranslation{french}{Budget Justification}{Justification du budget}
159 \DeclareTranslation{french}{Career Interruptions and Special Circumstances}{Interruption
160 \DeclareTranslation{french}{Context}{Contexte}
161 \DeclareTranslation{french}{Creative outputs}{Réalisations artistiques}
162 \DeclareTranslation{french}{Description of previous and ongoing research results}{Descri
163 \DeclareTranslation{french}{Description of proposed student training strategies}{Descrip
164 \DeclareTranslation{french}{Description of the research team}{Description de l'équipe de
165 \DeclareTranslation{french}{Detailed Description}{Description détaillée}
166 \DeclareTranslation{french}{Exclusion of Potential Reviewers}{Exclusion d'évaluateurs é
167 \DeclareTranslation{french}{Expected Outcomes}{Résultats escomptés}
168 \DeclareTranslation{french}{Forthcoming contributions}{Contributions à venir}
169 \DeclareTranslation{french}{Knowledge Mobilization Plan}{Plan de mobilisation des conna
170 \DeclareTranslation{french}{List of References}{Liste des références}
171 \DeclareTranslation{french}{Methodology}{Méthodologie}
172 \DeclareTranslation{french}{Nonrefereed contributions}{Contributions non soumises à des
173 \DeclareTranslation{french}{Objectives}{Objectifs}
174 \DeclareTranslation{french}{Other refereed contributions}{Autres contributions soumises
175 \DeclareTranslation{french}{Previous Critiques}{Réponse à des critiques précédentes}
176 \DeclareTranslation{french}{Refereed contributions}{Publications soumises à des comités

```

177 \DeclareTranslation{french}{Request for Multi/Interdisciplinary Evaluation}{Demande d'é
178 \DeclareTranslation{french}{Research Contributions}{Contributions à la recherche}
179 \DeclareTranslation{french}{Research Team, Student Training, Previous Output}{Équipe de
180 \DeclareTranslation{french}{Research-creation Support Material}{Documents d'appui liés à
181 \DeclareTranslation{french}{Summary of Proposal}{Résumé de la proposition}
182 \DeclareTranslation{french}{Character count:}{Nombre de caractères:}
183 \DeclareTranslation{french}{of}{sur}