Version 2.5

# Center for Discovery of Great Topics

**2025 Hitch Hiker's Guide to Thesis Templates** 

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### Introduction



Write your presentation like a normal LaTEX file with a \maketitle command and \chapter and \section headings. The \maketitle contents are defined by the following macros:

\pretitle \title \subtitle
\author \extralogo

The \extralogo command specifies an extra logo below the AFIT crest. The \chapter heading creates a slide with just the chapter name. The \section heading sets the title of a new slide. However, if no text follows the section, no slide will be created. Text which does not fit on one slide will flow onto the next slide automatically. To get 4-by-3 aspect ratio slides, specify standard as an option to the document class.



#### **Double Column**

Use the \twocolumn and \onecolumn commands right after the section heading to control the number of columns. Text will flow from the left column to the right.

- Point one
- Point two
- · Point three
- Point four
- Point five

- Point six
- · Point seven
- Point eight
- Point nine
- Point ten
- Point eleven
- Point twelve

You can use \pagebreak to force text onto the next column.



You can create any variety of subdivisions on your slide by using the tabular environment.

Primary	Secondary	Tertiary	
First	Second	Third	
One	Two	Three	
Alpha	Beta	Gamma	
Green	Blue	Red	
Cyan	Yellow	Magenta	

The \cellcolor command sets the background color of a table cell.

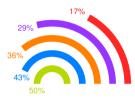


#### **Quad Charts**

#### **Itemized Lists**

Budget: \$1,000,000
Spent to Date: \$725,000
Remaining: \$275,000
Burn Rate: \$150,000/mo.
Projection: On track

#### Graphs



#### **Tables**

Category	Budget	Spent	Remaining
Salaries	\$500,000	\$325,000	\$175,000
Equipment	\$200,000	\$180,000	\$20,000
Travel	\$50,000	\$30,000	\$20,000
Marketing	\$150,000	\$125,000	\$25,000
Miscellaneous	\$100,000	\$65,000	\$35,000
Total	\$1,000,000	\$725,000	\$275,000

#### Text

Unless absolutely required, avoid quad charts. Their fourquadrant structure often becomes overloaded with text, data, and visuals, making them visually cluttered and difficult to read. The limited space in each quadrant forces critical details to compete for attention, overwhelming audiences and obscuring key points. This density, combined with small fonts and cramped layouts, creates a readability nightmare, especially for those trying to quickly grasp the content, ultimately hindering clear communication. You are far better off using four separate slides.



Use the Center environment to center horizontally *and* vertically.

# **Explicit Code**



Use the python environment for Python code.

```
def write_list(fid, x, level):
          ind = ' '*level
3
          xs = '0' \text{ if } abs(x[0]) < 1e-3 \text{ else } "%.3f"
          txt = '\n%svalues=\"%s' % (ind, xs)
4
5
          for n in range(1, len(x)):
              xs = '0' \text{ if abs}(x[n]) < 1e-3 \text{ else "%.3f"}
6
              if len(txt) + 3 + len(xs) >= 80:
                   fid.write(txt + ':\n')
                   txt = ind + ' ' + xs
9
              else:
10
                   txt += '; ' + xs
11
12
          fid.write(txt + '\"')
```



#### Use the matlab environment for MATLAB code.

```
function savepdf(name, width, height)
% name is the file name including ".pdf".
% Both width and height are in (cm).
set(gcf, 'units', 'centimeters', ...
'position', [0, 0, width, height])
set(gca, 'FontSize', 9);
set(gca, 'FontName', 'Times New Roman');
exportgraphics(gcf, name, ...
'ContentType', 'vector');
end
```



Use the rlang environment for R code.

```
factorial <- function(n) {
    if (n == 0 || n == 1) {
        return(1)
    } else {
        return(n * factorial(n - 1))
    }
}</pre>
```



Use the pseudocode environment for non-language-specific code.

```
function add_arrays(a, b, N)
      c \leftarrow zeros(N)
      for n in 0: N-1
         if a_n and b_n are real
            c_n = a_n + b_n
5
         end if
6
      end for
      return c
  end function
```

## **Control and Classification**



Unless your presentation is being distributed, no markings need to be applied. If it is approved for public release without restriction, you can mark it as Distribution A with the \distributionA command in the preamble.

If it is approved with a different distribution statement (B through F), specify the banner (markings in the header and footer) (e.g., \banner{cui}) and fill in the details with the \cui command:

```
\cui{Controlled By: AETC \\
   Controlled By: AFIT/ENG \\
   CUI Category(ies): PRVCY \\
   Distribution: \DistB{CATEGORY}{DATE}{OFFICE} \\
   POC: John Smith, 555-123-4567}
```



For classified information, use the \banner command and the classification (e.g., \banner{secret}) and the \classified command:

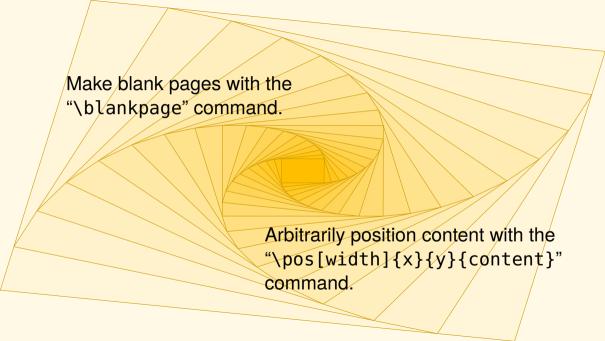
```
\classified{
   Classified By: \\
   Derived From: \\
   Declassify On: }
```



Although specific colors are not officially dictated, it is common to use certain colors for certain degrees of information control. A color theme can be set for the presentation by entering the color as a parameter to the class: \documentclass[purple]{afitdefense}. The commonly used colors are

Top Secret//SCI	yellow	Confidential	blue
Top Secret	orange	CUI	purple
Secret	red	Uncontrolled	green

Note that "CUI" means "Controlled Unclassified Information."





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The views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the United States government, Department of Defense, United States Air Force, or Air University.

The AFIT of today is the Air and Space Force of Tomorrow.