Title

Name

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Outline

1

General

Bulleted List Slide Example

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.
- Curabitur dictum gravida mauris.
- Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque.
- Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

Side-by-Side Bulleted List + Figure Slide Example

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.
- Curabitur dictum gravida mauris.
- Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque.
- Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

Top-Bottom Figure + Bulleted List Slide Example

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.
- Curabitur dictum gravida mauris.
- Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque.
- Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

Side-by-Side Figures Slide Example

→ Colors

- General colors: niceblue nicered nicegreen nicepink nicegray
- Grays: lightgray mediumgray darkergray
- CSU colors: csugreen csugold csugreendarker
- Beamer theme colors (global): fixedtextcolor fixedbgcolor tcolorboxbg primary-color graycolor
- Beamer theme colors (light/dark): textcolor textcolorlight textcoloremph bgcolorlight edgecolor

→ Nested `itemize` and `enumerate` Environments

- Apples
  - Apples
    - Apples
    - Apples
  - Apples
  - Apples
- Apples

1. Oranges
   1.1 Oranges
   1.2 Oranges
      1.2.1 Oranges
      1.2.2 Oranges
   1.3 Oranges
2. Oranges
3. Oranges

2

Environments

→ Quote

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

→ Theorem, Definition, and Algorithm

Theorem (Some Text)

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque.

Definition (Some Text)

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

Algorithm (Some Text)

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

Special Call-Out Boxes (1)

- These are intended to be in an itemize/enumerate environment

Remark

Lorem ipsum dolor sit amet, consectetuer adipiscing elit.

Important

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.

Upcoming

Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

Question

Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

Special Call-Out Boxes (2)

Optional

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

Review

[Review Context] Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus.

Review

[Review Context] Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus.

Review

[Review Context] Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus.

Code Listing

Some Matlab code:

```
% This program prints Hello, world!

disp("Hello, world!")
```

Some Python code:

```
# This program prints Hello, world!

print('Hello, world!')
```

Be sure to use the `myslidefragile` environment!

3

Commands

Footnote Commands

Use[1] `\parnote` and[2] `\parnotefull` for[3] footnotes[4,5]
Use the `b` slide option when you have footnotes

[1] This is the first one [2] This is the second one [3] This is the third one that takes up the rest of the line
[4] This is the forth one that takes up the rest of the line
[5] This is the fifth one

→ URL Commands

`\urlfull` with an example https://www.engr.colostate.edu/~drherber and in a footnote[1]
`\urlhttps` with an example www.engr.colostate.edu/~drherber and in a footnote[2]
`\urlvideo` with an example www.youtube.com/watch?v=N17Od3rY0bA and in a footnote[3]

[1] https://www.engr.colostate.edu/~drherber [2] www.engr.colostate.edu/~drherber
[3] www.youtube.com/watch?v=N17Od3rY0bA

→ Other Commands

Use `\qedsymbol` for □
Use `\myterm` for terms like #*Term* (see next slide and `\mytermslides`)
Use `\myline` for a horizontal dividing line

Use `\eqrepeat` to repeat the last equation number (good when you want to repeat an equation on the next slide):

$$A = \frac{\pi r^2}{2} \tag{1}$$

$$A = \frac{\pi r^2}{2} \tag{1}$$

→ Examples of Terms #*Term Title*

#*Term Text 1* Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. #*Term Text 2* Curabitur dictum gravida mauris.[1]

Theorem (Great Theorem)

Curabitur dictum gravida mauris. #*Term Theorem Text*

1. #*Term List 1*
2. #*Term List 2*

Remark

#*Term Box*

Doesn't work in equation environments, but you can use inline math such as #*Term* $x - \mathcal{L} - \boldsymbol{x}$

[1] They work in a footnote #*Term Footnote*

4

Math

→ `subequations` and Tags

Multi-line aligned equation with some custom tags:

$$y = x^2 \tag{2a}$$
$$z = \sin(x)$$
$$p = \log(x) \tag{2b}$$
$$q = e^x \tag{A}$$

`eqbox` Command

This is an equation: $\boxed{A = \frac{\pi r^2}{2}}$. Here it is again:

$$\boxed{A = \frac{\pi r^2}{2}} \tag{3}$$

Another a symbol is $\boxed{\alpha}$

→ `bNiceMatrix` and `pNiceMatrix` Environments

$$\begin{array}{c} \\ r_1 \\ r_2 \end{array} \begin{array}{c} \begin{array}{ccc} c_1 & c_2 & c_3 \end{array} \\ \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \end{bmatrix} \end{array} \tag{4}$$

$$\begin{array}{c} \\ L_1 \\ \vdots \\ L_4 \end{array} \begin{array}{c} \begin{array}{cccc} C_1 & \cdots & \cdots & C_4 \end{array} \\ \begin{pmatrix} a_{11} & a_{12} & a_{13} & a_{14} \\ a_{21} & a_{22} & a_{23} & a_{24} \\ a_{31} & a_{32} & a_{33} & a_{34} \\ a_{41} & a_{42} & a_{43} & a_{44} \end{pmatrix} \\ \begin{array}{cccc} C_1 & \cdots & \cdots & C_4 \end{array} \end{array} \begin{array}{c} \\ L_1 \\ \vdots \\ L_4 \end{array} \tag{5}$$

5

Figures

`myfig` Command

→ `myfigcol` Command

Nunc sed pede. Praesent vitae lectus. Praesent neque justo, vehicula eget, interdum id, facilisis et, nibh. Phasellus at purus et libero lacinia dictum. Fusce aliquet. Nulla eu ante placerat leo semper dictum. Mauris metus. Curabitur lobortis. Curabitur sollicitudin hendrerit nunc. Donec ultrices lacus id ipsum.

myoverpic Environment

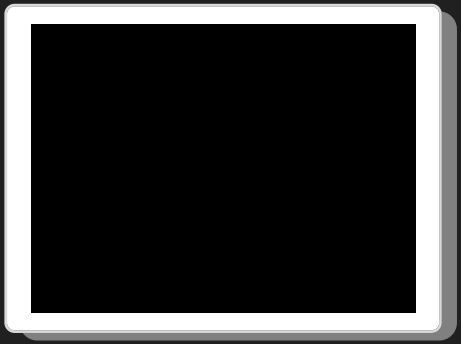
myoverpiccol Environment

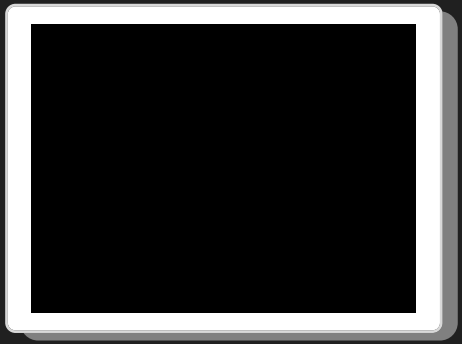
→ Sizes

Slide width `\paperwidth` 5.5129 in 139.99835 mm 398.33858pt
Slide height `\paperheight` 3.54399 in 89.99893 mm 256.0748pt
Text width `\textwidth` 4.72533 in 119.9986 mm 341.43309pt
Text height `\textheight` 3.30107 in 83.82994 mm 238.52208pt
New line height `\baselineskip` 0.15154 in 3.84843 mm 10.95pt
Item separation `\myitemsep` 0.04152 in 1.05437 mm 3.0pt

Side-by-Side Recommended Figure Sizes

Recommended figure width 2 in (below)
Recommended figure height 1.5 in (below)





Matlab recommended figure width 2.25 in
Matlab recommended figure height 1.6875 in

6

References

References with BibLaTeX

`\cite` with an example: Shampine 2007
`\textcite` with an example: Shampine (2007)
`\parencite` with an example: (Shampine 2007)
`\fullcite` with an example: L. F. Shampine (Aug. 2007). "Accurate numerical derivatives in MATLAB". *ACM Transactions on Mathematical Software* 33.4, p. 26. DOI: 10.1145/1268776.1268781

`\citetitle` with an example: "Accurate numerical derivatives in MATLAB"
`\citetitle` with an example: *Engineering Design Optimization*
`\citeauthor` with an example: Shampine
`\citeurl` with an example: https://textbooks.math.gatech.edu/ila/ila.pdf

Multiple citations work like this example (Martins and Ning 2021; Boyd and Vandenberghe 2009; Cipra 2000) and in a footnote[1]

See command `\refslides` for printing the references

[1] Martins and Ning 2021; Boyd and Vandenberghe 2009; Cipra 2000

→ Terms

- # *Term* is on Slide 16
- # *Term Text 1* is on Slide 17
- # *Term Text 2* is on Slide 17
- # *Term Theorem Text* is on Slide 17
- # *Term List 1* is on Slide 17
- # *Term List 2* is on Slide 17
- # *Term Box* is on Slide 17
- # *Term* $x - \mathcal{L} - \boldsymbol{x}$ is on Slide 17
- # *Term Footnote* is on Slide 17
- # *Term Title* is on Slide 17

References

- S. Boyd and L. Vandenberghe (2009). *Convex Optimization*. 7th ed. Cambridge University Press
- B. A. Cipra (2000). "The Best of the 20th Century: Editors Name Top 10 Algorithms". *SIAM News* 33.4. URL: https://archive.siam.org/pdf/news/637.pdf
- D. Margalit and J. Rabinoff (2017). *Interactive Linear Algebra*. Georgia Institute of Technology. URL: https://textbooks.math.gatech.edu/ila/ila.pdf
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- L. F. Shampine (2007). "Accurate numerical derivatives in MATLAB". *ACM Transactions on Mathematical Software* 33.4. DOI: 10.1145/1268776.1268781

Questions?

Link1
Link2

Title
Number

Author 1
Author 2
Author 3

Appendix Slide