

# Making a STEP PDC: Basic L<sup>A</sup>T<sub>E</sub>X

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## 1 What will be the title of your proposed PDC?

Basic L<sup>A</sup>T<sub>E</sub>X: An Introduction to Typesetting Using L<sup>A</sup>T<sub>E</sub>X

## 2 What are your goals for this PDC?

My goals are to introduce document preparation using L<sup>A</sup>T<sub>E</sub>X for mathematical, scientific, and technical writing and presentation.

## 3 What would you hope that students walk away with?

I would hope that students understand the concept of a markup language and of typesetting possibilities beyond standard WYSIWYG editors. I would also hope that students walk away having created a L<sup>A</sup>T<sub>E</sub>X document about something of interest to them.

## 4 What specific lesson(s) will you teach to achieve your goal?

1. Have students bring iPads or laptops and walk through creating an Overleaf account or installing a local distribution of L<sup>A</sup>T<sub>E</sub>X through TeX Live or MikTeX
2. Show examples of L<sup>A</sup>T<sub>E</sub>X documents like mathematical papers from the arXiv or linguistic papers containing multilingual materials
3. Go over basic document layout and common packages
4. Show students how to search for other packages for specific use cases and how to read documentation
5. Provide a brief overview of drawing diagrams using the TikZ package

## **5 What will you do to teach/get your lesson across?**

1. Create a presentation (in L<sup>A</sup>T<sub>E</sub>X) on what the language is and how to begin using it through Overleaf or a local distribution
2. Create a presentation on common typesetting tasks and how to achieve them in L<sup>A</sup>T<sub>E</sub>X
3. Create a presentation on possible uses of L<sup>A</sup>T<sub>E</sub>X and how to find packages for specific use cases
4. Create a presentation of TikZ and how to begin using it to draw shapes, graphs, and diagrams
5. Use my laptop, my iPad, and a projector as presentation tools
6. Walk through getting an Overleaf account or local distribution of L<sup>A</sup>T<sub>E</sub>X, as well as how to begin creating a document

## **6 Do students need to bring anything to this PDC?**

Yes; some kind of personal computing device (i.e. tablet or laptop) is required.

## **7 Will you need to prepare any materials/handouts for this PDC?**

Yes; I will need to make the mentioned presentations and possibly provide handouts with an agenda.