# Math for the People Module Template (Title Here)

*The introduction should give a very brief overview of the material which will be covered in the module. This introduction will be published on the first page of the module, above the table of contents in the HTML version.*

*Guidelines for including interactive & non-text resources:*

* *You can include images, videos, and sound files in your document. If possible, please create a zipped folder with the original files at high resolution – this will help us in creating the final PreTeXt document. Be sure to include proper citations for any files from sources and use images/videos/files which are licensed CC-BY.*
* *To insert a video from a link (like YouTube or another source), you can just include the URL.*
* *To insert a Geogebra object, you can just include the URL.*
* *To insert a Desmos object, go to the Desmos object that you want to share and choose ``Share,'' followed by ``Embed.'' Then paste that URL into your document.*
* *Computer programming examples can be included, in any language that SageMathCloud supports - see* [*https://doc.sagemath.org/html/en/reference/spkg/*](https://doc.sagemath.org/html/en/reference/spkg/) *for a full list. Make sure you specify the language that you want the code to use, and highlight any code blocks in* ***bold****.*

***Code: Python***

***x = 2***

***y = 2***

***z = x+y***

***print(z)***

## Objectives

*Every module should have objectives, both for the mathematical content & for the social justice content. You should make sure that your objectives are student-centered and culturally responsive. For a list of assessable activities organized by level, see Bloom's Taxonomy at* [*https://mygrowthmindsethome.files.wordpress.com/2019/03/blooms-taxonomy.pdf*](https://mygrowthmindsethome.files.wordpress.com/2019/03/blooms-taxonomy.pdf)

*Objectives for this level will fall roughly in the range of Comprehension, Application, and Analysis, since the course is aimed at a first-year post-secondary audience.*

## Understanding the Issue

*The first content section is Understanding the Issue. This section serves as a deep dive into the social justice issue. The discussion should be accessible to all student audiences, regardless of background. For some social justice issues, like racially-biased policing or access to reproductive care, remember that students may have personal experiences with the topic, which should be respected and validated.*

## Cui Bono – Who Benefits?

*The second content section is Cui Bono: Who Benefits? In this section, which is relatively short, should explore who the chief obstacles are to fixing this problem. With any social justice issue, there will always be people who benefit from maintaining the status quo. By establishing who those people and institutions are, we can give students an idea of who will be most resistant to change.*

## The Big Problem: (Problem Title)

*The third content section is the Big Problem - this is a short summary of how we'll use mathematics to look at the issue that we're interested in. This summary shouldn't be long - you really just want to introduce the mathematical applications. You should start the section with a short description of the big problem in bold. This will be set aside in the actual text to give emphasis.*

## Mathematics Topics

*We suggest that most modules should cover 3-4 mathematical topics. These topics should be directly applicable to the social justice topic, but don't need to be connected in other ways. For example, a chapter on climate change might cover correlation and regression (to show that the global temperatures are rising), geometry (to explore how carbon dioxide traps solar radiation in the atmosphere), and data analysis/visualization (to look at which industries and countries contribute to the crisis). Our goal is that each module should be sized to cover in 2-3 weeks of class time in a traditional American 16 week course or 1-1.5 weeks in an 8 week course. Each topic should be approachable without any specialized background.*

## (Math Topic I)

## (Math Topic II)

## (Math Topic III)

## Solving for Change

*Solving for Change is the keystone of each module. This section should integrate the social justice concept with the mathematics that we've learned in the previous sections. How can this mathematics be used to understand the problem, start conversations, and begin to create change? You can integrate mathematical explorations with more specific information (especially quantitative information) about the problem.*

## Reading Questions

*Every module should have reading questions which encourage deeper thought and research into the topic of the module. This doesn't necessarily need to be quantitative in nature, but the questions should encourage quantitative inquiry and use of the mathematical topics to understand the issue and begin creating change.*

## Exercises

*Every module should also have exercises which give the students opportunity to practice their quantitative skills. These exercises can be relatively short computations, more involved problems which require computations and reasoning about the social justice topic, or more extensive projects involving research, computation, and analysis.*

## References

*References will be in AMS style. Create a numbered list of your bibliography item and use those numbers for in-text citations [1]. That will make it easier for us to merge the references into PreTeXt. Feel free to use a mixture of peer-reviewed and non-peer-reveiewed references.*

1. A. Author, B. Second-Author, *Title of Book*, Publisher, Place of Publication, year, DOI, http://citation.web.page.
2. A. Author, Title of Article, *Abbreviated Journal Title* **Volume** (year) page--page, http://citation.web.page.
3. A. Author, Publisher of Information, Title of Webpage (date), http://citation.web.page.