

# Science Café: Designing a book club for undergraduate STEM majors

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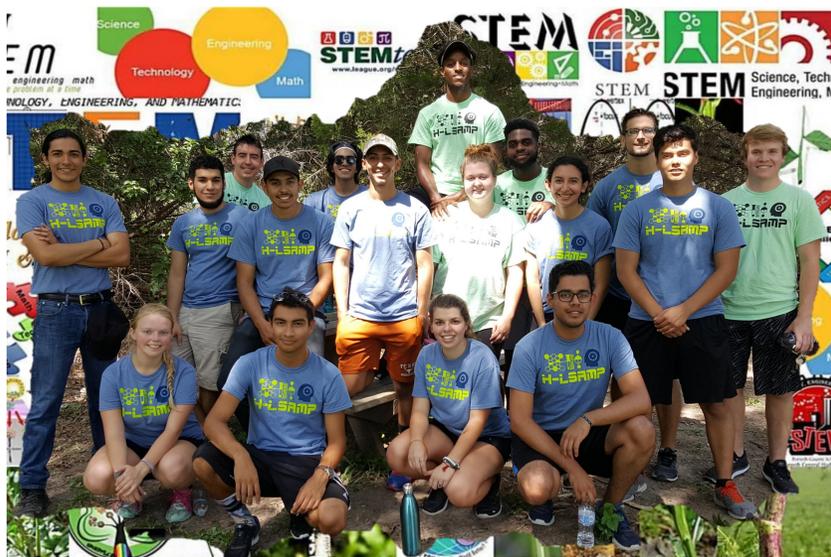
## INTRODUCTION

Science Café Book Club is in its 11th year at Texas State University. Each semester, undergraduate STEM majors choose among a curated assortment of fiction and non-fiction - that does not include textbooks - and vote on the selection to be read. STEM faculty serve as facilitators who encourage students to explore texts for connections to their lives and to think critically about contemporary scientific, technical, and ethical themes.

The mission of the Science Café Book Club is to further our charge in higher education to broadly educate STEM majors and not just churn out technically skilled workers. Reading for pleasure - not just for schoolwork - is a formative experience that can enable students to understand themselves and their own world more deeply.

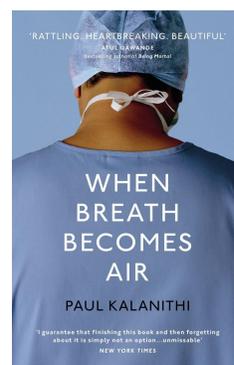
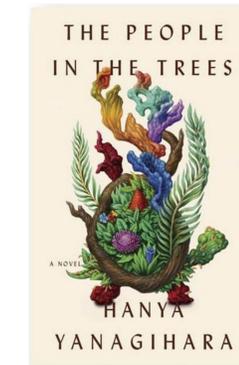
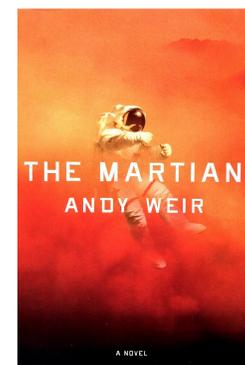
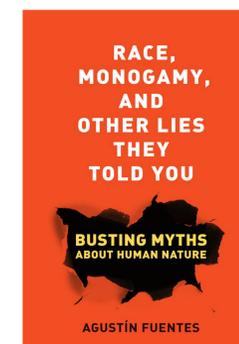
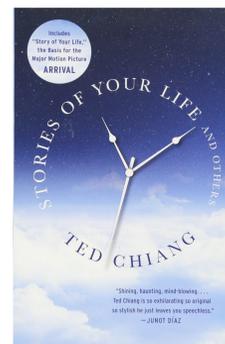
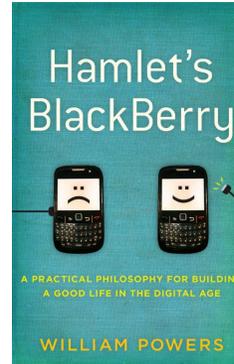
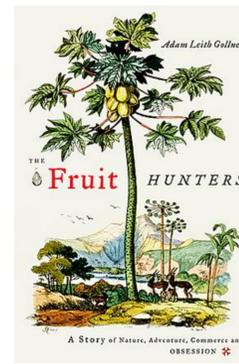
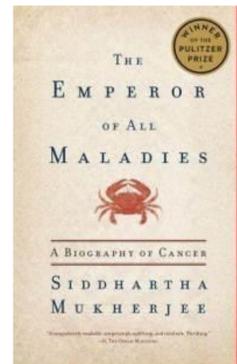
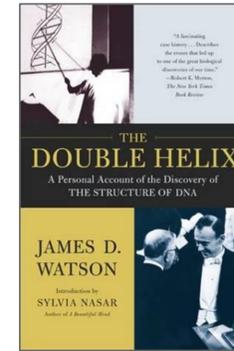
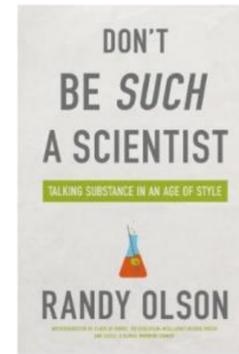
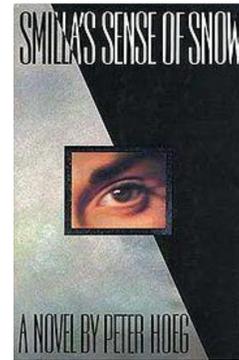


The idea for Texas State's Science Café grew out of the Café Scientifique and Science Café movements started in the UK and United States in roughly 2006. Many of these cafés are public forums held outside of academia and feature speakers on topics in science and technology. Their common, salient purpose is to encourage conversation among experts and non-experts in order to engage and educate a broader citizenry.



We tweaked this idea, reshaping the civic forum into a college student forum and folded it into an academic enrichment program (H-LSAMP) for minority and underrepresented students majoring in STEM.

## GOOD READS

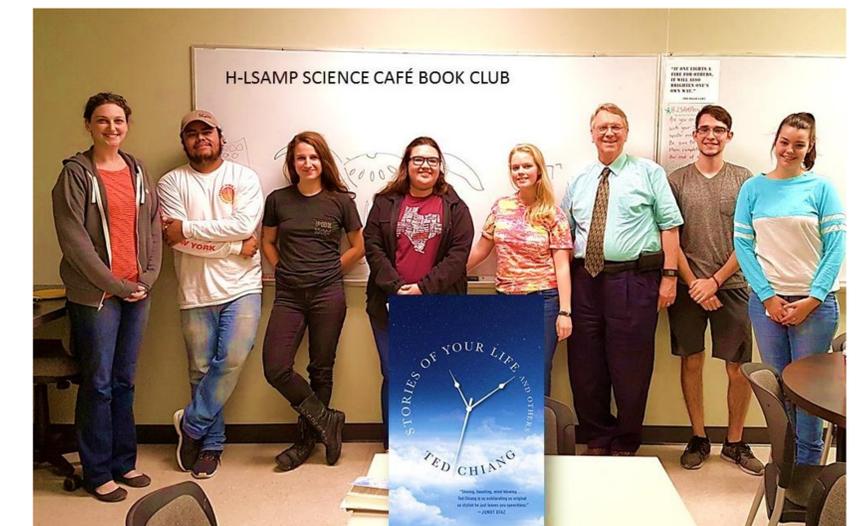


## HOW TO SET UP YOUR BOOK CLUB

- Develop list of 10-12 books at beginning of each semester
- Design e-book with summary descriptions of each book
- Ask students to review e-book and rank their selections (lowest to highest); book club participants must agree ahead of time to read whichever book receives highest ranking
- Purchase and distribute books; allow students 6-8 weeks to read book
- Facilitator(s) read book and develop two sets of discussion questions (e.g., science, history, culture that informs plot, themes, characters; how stories and ideas relate to students' lives as STEM majors and future STEM professionals)
- Hold two discussion sessions
  - First discussion - 1 ½ hours - (pizza night; Director as facilitator; students lead discussion; first set of discussion questions)
  - Second discussion - 2 ½ hours - (home-cooked, sit-down dinner; Director and other faculty members lead discussion; second set of discussion questions)

## RECOMMENDATIONS

- Limit group size (10-15 students) to maximize participation
- Include STEM faculty as co-facilitators for discussion night
- Be circumspect about selecting books with 300+ pages
- If available, purchase hardback books rather than paperbacks
- Assign "homework" to students on vocabulary, historical/scientific/cultural references
- Have students use visual aids (drawing on whiteboard) during discussion sessions
- Watch film version of book after both discussion sessions conclude



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Café Scientifique <http://www.cafescientifique.org/>  
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*I hope this list will help you find a few great books for your own Science Café Book Club!*

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American Scientist – Scientists’ Nightstand

<https://www.americanscientist.org/free-tag-names/scientists-nightstand>

ScienceFriday Book Club

<https://www.sciencefriday.com/series/scifri-book-club/>

The Man Booker Prize Awards

<http://themanbookerprize.com/>

The Pulitzer Prize Book Awards

<http://www.pulitzer.org/prize-winners-by-year/2017>

The National Book Awards

<http://www.nationalbook.org/>

The New York Times Book Review

<https://www.nytimes.com/section/books/review>

The Guardian Book Review

<https://www.theguardian.com/books>

UC Berkeley Summer Reading Lists

<http://reading.berkeley.edu/>

The Columbia Review of Books

<http://www.thecolumbiareview.com/books/>

Scientific American Books

<https://www.scientificamerican.com/store/books/?filter=sa-ebooks>

Campbell Awards for Best Science Fiction

<http://www.sfcenter.ku.edu/campbell-finalists.htm>

The MIT Press

<https://mitpress.mit.edu/>

Kirkus Review

<https://www.kirkusreviews.com/lists/>

The Library Journal

<http://reviews.libraryjournal.com/category/books/?ref=menu>

Kepler’s Books

<http://www.keplers.com/science%20and%20big%20ideas>

National Endowment for the Arts Big Read

<https://www.arts.gov/partnerships/nea-big-read>

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