What does PRIMUS offer us?

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What PRIMUS is

PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies is a refereed journal (8 issues per year currently; 10 issues starting 2013) devoted to dialogue and exchange of ideas among those interested in teaching undergraduate mathematics. This includes those who prepare students for college level mathematics, those who teach college level mathematics, and those who receive students who have been taught college level mathematics.

Each issue contains relevant and worthwhile material for those interested in collegiate mathematics education. While the primary interest is in first person descriptive and narrative articles about implemented teaching strategies and interesting mathematics, there is also opportunity for writing broad survey articles, formal studies of new teaching approaches, assessments of curricular or program strategies, and general discussion of teaching undergraduate mathematics.



What PRIMUS is, ctd

- The journal is in its 22nd year.
- Founding Editor-in-Chief Brian J. Winkel was a professor at West Point, and a big fan of active learning, modeling, using computer algebra systems and computational technology, and innovative approaches to curriculum. These themes are all reflected in the articles PRIMUS publishes.
- "Mathematics" is interpreted broadly, and includes both mathematics education and statistics.
- We currently publish 8 issues per year. In 2013 we will move to 10 per year, in part to address our current 2-year backlog of articles.
- A journal devoted to creative issues surrounding the teaching of collegiate mathematics.



What PRIMUS could be for you

- A place to get good ideas for modeling (or other types of) projects for your classes.
- A place to find novel ideas for teaching in new ways. We publish articles at all levels of the college curriculum.
- A resource for articles on broad issues related to teaching mathematics: capstone courses, writing in mathematics, use of computing technology and other technologies, and more.
- An outlet for some of your good ideas that you'd like to share with others.
 Maybe related to this MAA PREP workshop; maybe stemming from some other work you've done.

Modeling an Outbreak of Anthrax		Journal Article
Rod Sturdivant & Krista Watts		
Journal: PRIMUS	Volume 20, Issue 4, April 2010, pages 344-361	Full access
Version of record first published: 29 Apr 2010		1
Download full text View full text Abstract References Relate	Open URL	
Modeling Population Growth and Extinction		Journal Article
Sheidon P. Gordon		
Journal: PRIMES Version of record first published: 02 Nov 2009	Volume 19, Issue 6, October 2009, pages 548-560	Full access
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AN EXCURSION INTO MATHEMATICAL MODELING		Journal Article
Olivia M. Carducci BS and MS and PhD		1
Journal: PRIMUS Version of record first published: 13 Aug 2007	Volume 6, Issue 3, January 1996, pages 253-266	₩ Buy now
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Sharks, Minnows, and Wheelbarrows: Calculus Modelin	ng Projects	Journal Article
Michael D. Smith		
Journal: PRIMES Version of record first published: 13 Feb 2011	Volume 21, Issue 2, February 2011, pages 197-209	Full access
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☐ MODELING THE SLIDING/FALLING LADDER PARADOX		Journal Article
Dr. William P. Fox BS and MS and M.D. & James B. Fox BS		Journal Article
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Journal: PRIMUS Version of record first published: 13 Aug 2007	Volume 13, Issue 3, January 2003, pages 277-286	
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Stabilizing a Bicycle: A Modeling Project		Journal Article
Timothy J. Pennings & Blair R. Williams		
Journal: PRIMUS	Volume 20, Issue B. October 2010, pages 627-645	Full access
Version of record first published: 29 Oct 2010		
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Undergraduate Research: Mathematical Modeling of M	ortgages	Journal Article
Youngna Choi & Steven Spero		
Journal: PRIMUS Version of record first published: 29 Oct 2010	Volume 20, Issue 8, October 2010, pages 698-711	Full access
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What makes a good PRIMUS article (IMHO)

- At least one novel idea. What is it that you are doing that no one else seems to have thought of, or that no one else seems to have thought of in the way you are doing it?
- Crisp exposition. Can you write in an engaging style that attracts and rewards the reader with good ideas and clear understanding?
- Evidence and explanation. What parts of your experience with this idea provide evidence that your approach or work is worthwhile? Can you explain your ideas so that they are easily followed by others?
- Portability. Is it likely that someone at another institution can adopt your approach, or adopt a slightly modified version of it, with reasonable effort?
- Absence of negative commentary on students' shortcomings.
- Two samples: "Functional DNA" and "Predicting Flu Season Requirements"



A typical article

- 6-15 pages in length
- Narrative describing first-person teaching experience(s) centered around one or more novel ideas
- Discussion of interesting problem(s), required resources for the approach, and/or potential issues that one may face in attempting something similar (Problems ... Resources ... Issues ...!)
- Summary of outcomes
- More qualitative than quantitative: "here is something I tried that seemed to work that you should/could try, too."

Other opportunities

- Articles regarding program implementation (e.g. starting/integrating capstone courses, new efforts focused on remedial mathematics, tutoring or emerging scholars programs, major curriculum renovation, etc.)
- Inquire about a special issue. Contact the editor-in-chief or myself.
 Among planned or ongoing special issues yet to be published, we expect issues devoted to undergraduate research, capstone courses, service learning, tactile learning, history of mathematics, modeling in differential equations, inquiry-based projects in mathematics for the liberal arts, and actuarial education.
- The issue on tactile learning grew out of a contributed paper session on that theme at the JMM in Boston 2012. The same is true of the one on capstone courses, as well as the one for service learning (New Orleans 2011). We expect to now do this annually: in San Diego 2013, there will be an MAA session on actuarial education that we expect to generate many articles in the corresponding special issue of PRIMUS. Another session in San Diego on modeling in differential equations is being organized by the folks who will guest edit the special issue on that topic.

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