SIMIODE Special Issue:

*International Journal of Mathematical Education in Science and Technology*


*Using Modeling to Motivate and Teach Differential Equations*

We invite colleagues to submit articles for publication in a SIMIODE Special Issue of *International Journal of Mathematical Education in Science and Technology*, devoted to using modeling to motivate and teach differential equations.

Recognizing that differential equations is a pivotal STEM course, we seek to provide sources of experiences and activities to support the use of modeling to introduce, motivate, teach and learn, understand, appreciate, and render transferability of the mathematics of differential equations to cognate areas.

Papers in which readers can take away usable materials and methods for their teaching with specific modeling activities, strategies for teaching, data used and referenced, and classroom narratives in which the engagement of both faculty and students in the use of models is demonstrated are most desirable. These papers should include specific modeling activities (with data used and referenced), teaching pedagogies or strategies, and classroom narratives on the engagement of both faculty and students in the use of differential equations as mathematical models.

Readers of this SIMIODE Special Issue should find useful and immediate material they can bring to their classrooms to use modeling to teach differential equations. While practical implementation is the main goal, there is opportunity for reflection – both personal and professional from students and teachers; assessment – instruments, approaches, and results; and broader discussion about such issues as timing, relevance and transferability to cognate courses, evidence of effectiveness, and motivation for teacher and student.

Submissions should be in the form of specific Classroom Notes. See [Aims and Scopes of IJMEST](https://www.simiode.org). Classroom Notes are shorter, but complete, peer-reviewed articles which are not research articles, and are often new ideas for the mathematics teacher to use in teaching. The ideas and activities rendered should be immediately usable. Length of contributions should be on the order of 3,000 words, excluding references, tables, and figures. Longer papers may be considered should the material merit extended coverage. The language for publication is English. Information for authors and technical templates for submission are available. See [information for authors](https://www.simiode.org), and [templates](https://www.simiode.org) for articles.

The first step is to submit an abstract proposal no later than 1 December 2022 for consideration by the Guest Editors, who will consider all proposals and notify authors of abstracts considered for full paper submission, by 15 January 2023 (see detailed timeframe and schedule). Abstracts should include the title, details of all authors, and be in the order of 250-500 words, excluding references (references not essential, may include a few in support of the proposal). Abstract proposals should be forwarded to [Director@simiode.org](mailto:Director@simiode.org).
Time Frame and Schedule

15 Oct 2022  Call for Papers (Title and Abstract) Issued by IJMEST
1 Dec 2022  Submit paper Title and Abstract for consideration
15 Jan 2023  Paper submission invitations extended to accepted abstract submissions
15 Mar 2023  Final due date of paper for publication submission consideration
31 Mar 2023  Manuscripts out for referee reads - double-blind, peer review process
1 May 2023  Manuscript from referee reads due
1 June 2023  Assemble reviews and reach initial editorial decision
             Communicate with authors – non-acceptance or request for revisions.
1 July 2023  Final revisions of accepted manuscripts due.
15 July 2023  Final acceptance decision letter sent to authors.
1 Aug 2023  Turn over manuscript materials for all articles to IJMEST.
1 Sep 2023  Journal setting and formatting with production of galleys for authors and editor to examine
15 Sep 2023  Notice of galleys go out to authors for final proofing
15 Oct 2023  Author final corrections submitted to IJMEST.
1 Dec 2023  Publication.

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