

What's new with WeBWorK?



Marianna Bonanome, TWP Community Manager
Andrew Parker, TWP Managing Editor OPL
Glenn Rice, WeBWorK Release Manager
Peter Staab, WeBWorK Developer

Introduction

WeBWork is an open-source online homework platform for STEM courses.

- **Free for students:** Allows for truly zero cost courses
- **Customizable & Adaptable:** Professors can ask questions they want to ask
- **Community-Driven:** Repository of over 35,000 questions
- **Opportunities for Analysis:** Ability to retrieve & analyze student interaction data

Features of WeBWorK 2.16

- Macro for inserting TikZ images into problems
- Macro for interactive graphing problems via JavaScript
- Manual problem grader that works for all problems
- Student nav for instructors acting as a student
- General improvements to Gateway Quizzes

To see WeBWorK 2.16 in action, go to:

<https://jasper.csm.p.missouriwestern.edu/webwork2>

Username and password are any of student0?? where ?? is anything from 01 to 50

Embedding WeBWorK problems in OER systems

- The standalone renderer <https://github.com/drdrew42/renderer> provides a scalable backend for problem rendering/grading
- This supplements, and can replace, the less scalable support provided by a regular WW server.
- Being used by
 - PreTeXt
 - LibreTexts

Community Events and Projects

Web presence working meeting (June 14-16, 2021)

- 12 community members
- Site redesign: www.openwebwork.org
- Wiki updates: https://webwork.maa.org/wiki/Main_Page

Community Events and Projects

Code Camps

OPL Code Camp: July 6-9, 2021.

- Expand the current OPL taxonomy to incorporate topics from the fields of Chemistry, Engineering, and Physics.
- Familiarity with coding problems is not required for participants, as our efforts will center on sorting and classifying existing problems.

Community Events and Projects

Code Camps

PG Code Camp: July 20-22, 2021.

- Modernize and organize the PG code base which facilitates authoring of WeBWork PG questions.
- Repairing and uniformizing the PG infrastructure and integrating tools for new technologies and ideas is long overdue.

Community Events and Projects

CUNY WeBWorK + [LibreTexts](#)

- **Linear Algebra** - CCNY, City Tech & York College
- **Introductory Statistics with Probability** - City Tech, BMCC & BCC
- **Algebra and Trigonometry** - City Tech
- **Calculus I** - QCC & BCC

Community Events and Projects

How you can get involved

Where we are headed

WeBWorK 3

- Complete rewrite of WeBWorK2, leverage OPL.
- Interface will be a Single Page Application (fast!!)
- The back end will be modular to allow breaking up the code into services.
- We hope this will get more developers in.

Thank you!

www.openwebwork.org