ORCCA pilot

For background on this textbook, see ORCCA.

For Winter 2018, we are using "Edition Beta" which has chapters 1–4 for MTH 60, and 5–9 for MTH 65. Visit its formats:

- HTML eBook,
- Largely de-colorized PDF
- WeBWorK demonstration course
- To order a physical copy, see see ORCCA for both an Amazon option and a PCC print center option.

Any PCC instructor has approval to pilot this book during the 2017/8 Academic Year.

- The MTH 60 portion (presently chapters 1–4) may be piloted through the full year,
- The MTH 65 portion (presently chapters 5–10) may be piloted in winter, spring, and summer
- The MTH 95 portion (presently chapters 11–17) may be piloted in spring and summer

[Any references to chapter numbers above may change. For example, MTH 65 might ultimately be chapters 5–10 if we reorganize things.]

FAQ

1. *What do I need to do to commit to piloting?*

   The main thing is that your FDC (and/or your department's administrative assistant) needs to know that you have made this decision. First of all, it will affect your department's book order of the commercial textbook. They assume you will use the commercial book and place an order based on that. While you could still change your mind for a little while after orders are placed, we do not want the book stores to end up with too many copies of the commercial book on their shelves.

   Also by law, the course catalog must indicate which sections only use course materials that cost $40 or under. The eBook is free, but the physical book is available from Amazon for $12 (for each of MTH 60, 65, and 95). And so your FDC/admin needs to make not of your decision into the system.

2. *How will students obtain a print copy and how much will it cost?*

   During Spring and Summer term, print copies are being sold through Amazon for $12. Students have free access to a PDF at http://spot.pcc.edu/~ajordan/orcca.pdf. The licensing permits anyone to print copies for any purpose.

3. How will students access the eBook?

   The eBook is hosted at http://spot.pcc.edu/math/orcca/orcca.html. In future terms, the eBook might reside inside Desire2Learn for PCC students. In that event, a public-facing version will remain available as a demonstration for people outside of PCC.

4. *Do I have to use WeBWorK to use this book?*

   No. The print copy and the eBook present the exact same homework questions, and you can assign them for traditional pencil-and-paper homework. The questions themselves look like typical questions from a book at this level. Using WeBWorK just adds a level of automated feedback.

5. *I'd like to use WeBWorK with this book. What's that like?*

   For the most part, it will be exactly like using WeBWorK is now. You *could* even just use WeBWorK exactly as people use it now: either loading the current PCC default problem sets, or using your own custom-built problem sets. But you will also be able to load and assign problem sets that come straight from the book by problem number. You'll load full problem sets from a section of the book, and then customize them as you like. A demonstration of this (with guest login enabled) is up at https://webwork.pcc.edu/webwork2/orcca-demonstration/.

   If you are brand new to WeBWorK, we will help you get going with it. You might start by reviewing Requesting/Maintaining WeBWorK course shells.

6. *I use D2L. How does that work with using WeBWorK for homework?*

   Not much will be different from how one uses WeBWorK via D2L for now. Single sign-on is the default setup. So you provide links from your D2L course into the WeBWorK course, and students follow those links without using a separate password. There is no separate registration of students into the WeBWorK course.

   If you like, you can also use grade passback form WeBWorK to D2L. However there are limitations on how grade pass back from WeBWorK to D2L behaves. It's a bit tedious to use problem-set-by-problem-set grade passback. Or you can just have one overall WeBWorK grade returned to D2L. This option is easy to set up, but can be confusing to a student who completed early assignments but sees a low score in their D2L gradebook (because WeBWorK is reporting the overall average using 0s for the future assignments).

7. *When reading the eBook, I see there are "exercises" at the end of a section. Can a student just work those right there for credit?*

   At this point, end-of-section exercises in the eBook are "static". There is no ability to submit an answer and "check" it, or see a solution. If you assign these problems in a WeBWorK course shell, then they work in the usual way, where solutions are visible after a set's due date.

8. *Will I be compensated for piloting the book and providing feedback?*

   No. However there will be biweekly meetings to discuss experiences, observations, suggestions, etc. Part-time faculty will be paid the special

projects rate for each hour of attending these meetings.

9. *I would like to contribute to the book. (Add/edit expository content, add/edit exercises, etc.) How can I do that? And does it matter that I don't know how to code WeBWorK problems?*

   First, that's great, and we want your help. Contact Alex Jordan or Ann Cary as a first step. In many instances, it will be OK for you to provide content written in MS Word or whatever, and let us convert it into PTX source content. If you have a certain level of comfort with working directly with technology, we can set you up to make contributions more directly too.

   If you contribute interactive examples or exercises, and you don't know how to code something for WeBWorK, that's fine. Just be prepared to clearly describe what you think the automated responses should look like. Both for various kinds of incorrect submissions, and for variations on what should be considered correct.

   If you contribute significantly and keep a record of your hours, we may have some funding to compensate you at the special project rate. Either way, please know that what you contribute will be owned by the college and released with an open license for people everywhere to use.

ORCCA problem sets in WeBWorK

First-time faculty users of WeBWorK should visit Requesting/Maintaining WeBWorK course shells for some basic information about using a WeBWorK course shell.

If you are using ORCCA as a textbook, then when you import problem sets, you can scroll to select the list of sets corresponding to sections of ORCCA. **Be sure to go to the ORCCA-201802 problem sets, not the ORCCA-201801 sets** which were used in Winter term, and need to stay in place for a few instructors letting their courses run long.

Filter	Sort	Edit	Publish	Import	Export	Score	Create	Delete

Import how many sets?: multiple sets ▾

Import from where?:
ORCCA-201802/def/set1_1-Arithmetic_with_Negative_Numbers_Exercises.def
ORCCA-201802/def/set1_1-Arithmetic_with_Negative_Numbers_Selected_Exercises.def
ORCCA-201802/def/set1_2-Fractions_and_Fraction_Arithmetic.def
ORCCA-201802/def/set1_2-Fractions_and_Fraction_Arithmetic_Exercises.def
ORCCA-201802/def/set1_2-Fractions_and_Fraction_Arithmetic_Selected_Exercises.def
ORCCA-201802/def/set1_3-Absolute_Value_and_Square_Root.def
ORCCA-201802/def/set1_3-Absolute_Value_and_Square_Root_Exercises.def
ORCCA-201802/def/set1_3-Absolute_Value_and_Square_Root_Selected_Exercises.def
ORCCA-201802/def/set1_4-Order_of_Operations.def

Import sets with names: (taken from filenames)

Note the three different kinds of sets:

- set1_1-Arithmetic_with_Negative_Numbers.def
  is just the interactive exercises from the reading section. You probably do not want to make homework sets out of these.
- set1_1-Arithmetic_with_Negative_Numbers_Exercises.def
  is the full set of all exercises at the end of the section which are available in WeBWorK. In this case, that's 46 exercises. You could load this set and then selectively remove problems. If you remove problems, you should take care *not* to re-number problems. That way the number of the WeBWorK problem will match the number of the corresponding problem from the actual book.
- set1_1-Arithmetic_with_Negative_Numbers_Selected_Exercises.def
  is a reasonable default selection of exercises to assign as homework.

Also, the Library Browser now has an "ORCCA (Spring/Summer 2018)" button to see problems from ORCCA. However, the problems here are only the problems that were coded within ORCCA itself. The majority of problems used in ORCCA are actually part of the BasicAlgebra, BasicMath, Math95, and CollegeAlgebra libraries, and so you will not see them by visiting the "ORCCA (Spring/Summer 2018)" library.

You can use the Library Browser to view all of the problems in any particular ORCCA problem set if you like. It may be just as easy to import the problem set though and work from there.