Intermediate Algebra: University of Idaho

(For a list of topics covered in the course, please see
http://www.theNCAT.org/R2R/AcadPrac/Topics/UI_IntAlg_Top.pdf.)

Intermediate Algebra is a one-semester, three-credit course that uses the following materials:

Commercial Materials

- Textbook: *Intermediate Algebra with Early Functions and Graphing*

  Authors: Margaret Lial, John Hornsby and Terry McGinnis
  Publisher: Addison Wesley
  Edition: 7th edition

- Software: *MyMathLab*

  Publisher: Pearson
  http://www.mymathlab.com/

Description: *MyMathLab* is modularized, allowing faculty to select the units they want to cover and to build a customized course. The software includes all content material, homework, quizzes, and tests and provides a rich and flexible set of course materials keyed to the text, along with course-management tools that make it easy to customize the course. The software is Web-based. Faculty can create and manage online homework assignments that are automatically graded, or use homework assignments from an online bank of exercises that are tightly correlated to the exercises in the text. Homework exercises include guided solutions and sample problems to help students understand and master mathematical concepts. Students may choose to work problems either from the software or from the textbook.

How to obtain: A variety of licensing and purchasing options are available. See the *MyMathLab* web site for more details. For example, Idaho students purchase the software bundled with the textbook.

Materials developed by the University of Idaho

- Test Questions

Description: *TestGen* is a Pearson product that allows faculty to write questions and create tests, algorithmically generating random numbers and supplying different iterations and variables so that each student receives a slightly different test. Hundreds of combinations can be generated on the fly. University of Idaho faculty have created test questions that can be used by those projects that use *MyMathLab* software. Tests can be uploaded to the publisher's server or used on a local server. The University of Idaho uses its own dedicated server. Tests are delivered locally using the *QuizMaster* software that accompanies *TestGen*.

Technical Requirements: Windows 98 or higher or Mac OS9 or higher.

How to obtain: Contact Kirk Trigsted at kirkt@uidaho.edu.

- Streaming Videos

Description: The University of Idaho has created short streaming videos of lectures for the entire course content. A typical video is about five minutes long. Some are two minutes, and the longest is 15 minutes. These videos are very specific and are used to deliver content. Students appreciate the stop, pause and rewind features.

Technical Requirements: Windows 98 or higher or Mac OS9 or higher.

How to preview:
http://www.sci.uidaho.edu/polya/math108/video_instruction/video_instruction.htm

How to obtain: Contact Kirk Trigsted at kirkt@uidaho.edu.

- Test Objectives

Description: A comprehensive list of test objectives has been developed for each test. Each objective is linked to a page showing the student where this objective can be found in the text and to the corresponding online lecture.

Technical Requirements: Web browser.

How to preview: http://www.sci.uidaho.edu/polya/math108/testobjectives/test_objectives.htm

How to obtain: Contact Kirk Trigsted at kirkt@uidaho.edu.

- Task Lists

Description: The task lists provide structure for students. There is a task list for each week of the semester. It is a list of detailed step-by-step instructions that take the students through the current week of material. The task lists show the students which online lecture corresponds with which specific homework problems. They also include helpful hints on specific problems. Students must turn in a task list with their homework each week.

Technical Requirements: Web browser.

How to preview: http://www.sci.uidaho.edu/polya/math108/assignments.htm

How to obtain: Contact Kirk Trigsted at kirkt@uidaho.edu.

- Calendars

Description: Staggered deadlines enable the university to serve large numbers of students efficiently. Idaho students are grouped into "Focus Groups," each of which has a calendar unique to the day of the week on which it meets. A typical "Tuesday Student" has a "Tuesday week" with "Tuesday deadlines". A typical "Wednesday Student" has a "Wednesday week" with "Wednesday deadlines," and so on. Students refer to their specific calendars for all important daily information and deadlines. The calendar is key to making sure that students do not get lost. The calendars can serve as models that need to be adapted to the particular calendars of new institutions.

Technical Requirements: Web browser.

How to preview: http://www.sci.uidaho.edu/polya/math108/Focus_Groups/calendar_01.htm

How to obtain: Contact Kirk Trigsted at kirkt@uidaho.edu.

- Customized SQL Data Base (Course Management Software)

Description: The University of Idaho has created a customized SQL database for course management, which runs on a dedicated server. All student records including time spent in the lab, focus group attendance, homework scores and test scores are stored in the database. The database supports such tasks as calculating how many minutes students must spend in the lab based on how well they did on the most recent test. Normally, students are required to spend at least three hours per week in the lab, but that time requirement can be reduced for students who are successful on their exams. The database interfaces with Banner, the University of Idaho administrative system.

Technical Requirements: Microsoft SQL Server 2000.

How to obtain: Contact Kirk Trigsted at kirkt@uidaho.edu.