



# CI 647: SCIENCE/MATH APPLICATIONS FOR NUTRITION/ENERGY (3 cr.)

## Spring 2016 WVU On-line Course Offering

**AUDIENCE:** Most appropriate for teachers of grades 3 and above who want to provide more authentic science and mathematics learning experiences for their students. Course content also relevant to health, physical education, and agriculture graduate students who envision working with youth in educational settings.

**CONTENT:** Overall course objective: develop competence in using food/nutrition subject matter to teach life, physical, and earth science concepts and mathematics as well as integrate science and mathematics learning.

- Features food composition and energy intake and expenditure data
- Examines school gardening—in the classroom and on the school grounds—as a powerful context for project-based learning and more broadly, STEM education
- Includes sustainability issues that integrate public and environmental health, e.g., human powered transit, energy utilization in food production
- Rich in examples of math as a tool to do science and science as a context to learn math
- Aligns with practices and content in the Next Generation Science Standards (NGSS) and Common Core State Standards for Mathematics (CCSSM)

**REQUIRED TEXT:** Insel, P. et al. (2016). *Discovering nutrition*. 5th ed. Sudbury, MA: Jones and Bartlett (available from WVU College Bookstore 304 293-4870).

**ON-LINE READINGS:** Acquaint participants with excellent resources such as

- Practitioner journals available through WVU Library that feature articles by teachers
- United States Department of Agriculture databases and analysis tools
- Publications of the National Academy Press
- Garden Project Based Learning curricula developed by teachers

**REGISTRATION AND PARTICIPATION DETAILS:** Entire course is on-line and asynchronous. There are two sections (see <http://courses.wvu.edu>): 001 (CRN 17887) and 7D1 (CRN 17888). **IMPORTANT:** Enrolled students must check their eCampus Course Mail and Announcements (<https://ecampus.wvu.edu/>) on the **first** day of class (M, 1/11/16) and proceed as instructed.

