This course covers issues of food, economics, population and health from a multidisciplinary viewpoint. The lectures will present evidence from developing and developed countries. Because the course will cover diverse topics such as economics of food and effects of food intakes on health, a multi-disciplinary framework is useful for understanding the inter-connections. Some knowledge of statistical and econometric methods will be helpful. The lectures will present the evidence in a general way and the students are not expected to learn the details of statistical methods. Most of the material is covered in my monograph *Food, economics and health*:

http://www.amazon.com/Food-Economics-Health-Alok-Bhargava/dp/0199269149/ref=ntt_at_ep_dpi_1
(A paperback version is also available).

The topics covered in the course will partly depend on students’ interests and include:

1. An overview of the problems of poverty, under-nutrition and health in developing countries:
   Discussion of measures such as Gini coefficient, height-for-age and weight-for-age available in the World Development Indicators database

2. Introduction to regression models for analyzing food and health inter-relationships:
   Dynamic regression models and short and long-run effects; maximum likelihood estimation; diagnostic tests; cross-sectional and longitudinal data; randomized controlled trials; policy evaluation in different settings.

3. Demand for food and income elasticities of foods and nutrients in developing countries:
   Quality of diet; different types of data for assessing food intakes; changes in food intakes with incomes; income elasticities of energy and nutrient intakes; evidence from India, Philippines and Kenya.

4. Modeling the effects of nutrients intakes on child health outcomes such as height, weight, and sicknesses in developing countries:
   Nutrient intakes and physical growth; determinants of child morbidity in countries such as Philippines and Kenya; interventions improving environmental conditions; effects of water quality on child morbidity in Bangladesh.

5. Models for children’s cognitive development in developing countries:
   Nutrition and infant development; psychological measures for assessing child development; school infrastructure; determinants of cognitive and educational achievement tests in countries such as Kenya and Tanzania.

6. Issues of fertility and child mortality in developing countries:
   Demographic surveys; data issues; theories of fertility and child mortality; determinants of child mortality and fertility in India.

7. Nutrition and labor productivity in developing countries:
   Economic models of health and productivity; physiological studies; health and wages; time allocation; determinants of time allocation in Rwanda.
8. Obesity in developed countries:
   Excessive food consumption and sedentary lifestyles; chronic diseases associated with
   over-weight; determinants of dietary intakes in the U.S; behavior and dietary changes in
   randomized controlled trials settings; effects of dietary intakes on body weights.

The emphasis of the course will be on a broad overview of the issues for designing food policies
that improve population health. Although the analyses use econometric methods, the lectures will
emphasize the substantive issues. The overall grade will be based on 3 assignments during the
semester that will require 5-page papers. A Graduate Assistant will help with any data issues.