



**Isfahan University of Technology
College of Agriculture
Department of Food Science**

Course name: **Advanced Cereal Science (MSc program)**
Prerequisite: Biophysical properties of foods
Lecturer: Dr. Mahdi Kadivar
Class/Time: Tuesdays 10:00-12:00, Classroom no. 1
Troubleshooting hours: Saturdays 10-12.

Reference book: Wrigley, C., Bekos, F. and Bushuk, W., 2006, Gliadin and Glutenin the unique balance of wheat quality, AACC, St. Paul. MN.

Theory:

Factors affecting bread quality including flour quality characteristics, flour enzymatic activity, improvers, additives (yeast, sourdough, chemical compounds) and how these factors dough preparation conditions, primary, secondary and final fermentations, characteristics Rheology of dough and its effect on the quality of baking and bread, proper baking conditions of bread, proper storage conditions of bread, rheological properties of bread and how to evaluate their quality, ways to reduce bread waste, technology of grain production products including breakfast flakes, baby foods, rice preparation technology and rice bran, grain starch production technology, new ideas related to the production of cereal products.

Course assessments (scores):

Midterm: 6 Quizzes (two): 2 assignments: 2 Final: 10