



**Wheat Quality Training**

California Wheat Commission  
1240 Commerce Ave, Suite A  
Woodland, CA 95776

**Course Instructors:**

Teng Vang, Lab Director  
Alejandra Andrade, Lab Manager

**General Information:**

This course is designed to provide participants with information about Wheat Quality: grain and flour quality, milling, and baking. Participants will learn through lectures, hands-on laboratory testing and baking at the California Wheat Commission's Wheat Laboratory.

**Samples analyzed will include:** Hard Wheats. We encourage participants to bring their own samples (1-2 grain samples - 5 lbs/each) but requires shipping samples 2-weeks ahead of training session.

**Objectives:**

- Gain knowledge of wheat quality
- Understand the impact of flour quality in baked products
- Learn to perform and interpret wheat quality testing methods
- Participate in a hands-on training experience

**Schedule:**

Participants will be training at the California Wheat Commission Quality Lab. This three-day training session will be from 9 AM – 5 PM (one-hour lunch). Most of the course will be hands-on training and participants will be assigned to different working stations. Tentative schedule:

Day 1: Lecture, Grain Quality and Milling,  
Day 2: Flour Quality, Dough Rheology, Lecture  
Day 3: Product application: Baking, Tortillas Intro

**COST:** This is a 3 -days training course. The cost for the training session is \$1,500 (Includes coffee and lunch). To register for the training session, please send contact information to [info@californiawheat.org](mailto:info@californiawheat.org).



## **Program**

### **Phase I - Analysis of Grain Quality**

1. Grain Moisture
2. Grain Protein
3. Grain Ash
4. Test Weight
5. Single Kernel Hardness, weight, diameter (SKCS)
6. Falling Number
7. PPO

### **Phase II – Milling Technology**

1. Wheat Tempering
2. Flour Yield & Flour types
3. Flour Particle Size Distribution
4. Starch Damage

### **Phase III – Flour Analysis & Dough Rheology**

1. Wet Gluten & Gluten Index
2. Farinograph
3. Mixograph
4. Alveograph
5. Overview of Solvent Retention Capacity and Sedimentation
6. Solvent Retention Capacity
7. Micro Sedimentation

### **Phase IV – Product Quality & Evaluation**

#### **Bread**

1. AACCI Puploaf
2. Dough Preparation
  - a. Mixing
  - b. Fermentation
  - c. Molding and Panning
  - d. Baking
3. Bread Evaluation - Scoring
  - a. Crumb and crust evaluation (color, defects)
  - b. Crumb grain and texture.

#### **Tortillas - Overview**