2012 UC Soil Fertility Short Course
February 22, 2012 • Buehler Alumni & Visitors Center, UC Davis

8:00-8:30 AM  Welcome, introduction
Instructors  • Tim Hartz, Dept. of Plant Sciences, UC Davis
             • Stu Pettygrove, Dept. of Land, Air and Water Resources, UC Davis

8:30-10:00 AM  Soil sampling and analysis
Topics: soil sample collection and handling for accuracy and repeatability • selecting
the right laboratory analytical techniques to fit specific agronomic needs

10:00-10:30  Break

10:30-12:00 PM  Soil test evaluation
Topics: relationship of physiochemical parameters to soil fertility • predicting soil N
mineralization from lab parameters; calibrating crop response to analytical results •
nutrient ratios • micronutrient availability

12:00-1:00  Lunch

1:00-2:30  Selecting fertilizers and application strategies
Topics: crop nutrient uptake patterns • N fertilizer forms, mechanisms of stabilization
and loss • choosing P and K fertilizers–soil reactions, salt index, availability over time

2:30-3:00  Break

3:00-4:30 PM  Developing crop nutrient management plans
Topics: crop-specific nutrient requirements • irrigation effects • environmental
considerations