# **Irrigation Technology Center**

Texas A&M University System

## SHORT COURSE ANNOUNCEMENT

#### **Course Title**

GPS (Global Position Systems) I: Introduction to Real Time Kinematic Surveying

# **Description**

This is a beginner's class on how to use GPS equipment for mapping and surveying. Students will receive "hands-on" training on a Trimble 5700 GPS Total Station. The class will consist of 2 classroom sessions: Tuesday morning and Thursday morning; and a field training session. The class will be divided into 3 groups for field training to allow hands-on experience with use of GPS equipment.



#### What is GPS?

GPS stands for "Global Position System." GPS equipment communicates with satellites to determine locations with great precision. Thus, locations can be quickly and accurately mapped. GPS data then can be used by mapping software such as CAD and GIS.

#### Who should attend this class?

Anyone interested in learning more about GPS equipment and mapping. Prior experience with GPS or surveying equipment is not necessary.

# **Course Syllabus:**

- C Understanding basic GPS principles and fundamentals
- C Understanding the RTK system and requirements for real-time kinematic surveying (survey grade centimeter precision)
- C General equipment guidelines
- C Setup, configuring, and operating the Trimble 5700 total station for RTK surveying
- C Field data collection procedures and office data processing

#### **Instructors**

The course will be taught by the:

District Management System (DMS) Team Extension Agricultural Engineering Texas A&M University System (956-969-5615)

Eric Leigh Extension Associate
Martin Barroso Agricultural Technician
Dave Flahive System Analyst/Programmer

Guy Fipps Professor and Extension Agricultural Engineer

#### **Dates and Location**

December 10-12, 2002 Texas A&M Agricultural Research and Extension Center Weslaco, Texas Room 157

#### **Course Schedule**

#### **Classroom Sessions**

(students are expected to attend both sessions)

Tuesday, Dec 10 8:30 am - 12 pm Thursday, Dec 12 8:30 am - 12 pm

#### Field Training

(students should select one of the following group sessions)

Group 1- Tuesday, Dec 10 1 pm - 4 pm Group 2 - Wednesday, Dec 11 8:30 am - 12 pm Group 3 - Wednesday, Dec 11 1 pm - 4 pm

# **Registration:**

The registration fee is only \$15 due to financial support through the Irrigation Conservation in the Rio Grande Basin Initiative.

Enrollment will be limited to ensure small class size.

A portion of the costs of this class is funded by Texas Cooperative Extension through the Rio Grande Basin Initiative administered by the Texas Water Resources Institute of the Texas A&M University System with funds provided through a grant from Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture, under Agreement No. 2001-001-45049-01149.

Educational programs conducted by Texas Cooperative Extension serve people of all ages regardless of socioeconomic level, race, color, sex, religion, handicap or national origin. The Texas A&M University System, U.S. Department of Agriculture and the County Commissioners Courts Texas Cooperating.

# Irrigation Technology Center http://itc.tamu.edu

#### SHORT COURSE REGISTRATION FORM

GPS (Global Position Systems) I Dec 10-12, 2002 Weslaco, Texas

### Please indicate your preference for the field training session:

Choose One		
12/10: 1 pm – 4:30 pm		
·		
12/11: 8:30 am – 12 pm		
·		
12/11: 1 pm – 4:30 pm		
·		

Name		
Company	_	
Address	_	
City	State Zip _	
Day Phone		
Number of Persons@ \$15 each = List of Additional Persons		
Total Enclosed (\$)		

Make Checks and Money Orders payable to: Irrigation Short Course

#### Mail to:

Amy Hardeman

Bio and Ag Engineering 2117 TAMU College Station, TX 77843

(979) 845-3977 phone (979) 847-8828 fax

email: amyhardeman@tamu.edu

#### Additional class information:

Eric Leigh or Martin Barroso

Texas Cooperative Extension Biological and Agricultural Engineering

(956) 969-5615 phone

email: e-leigh@tamu.edu