TEXAS A&M SCHOOL OF IRRIGATION
2006 Summer Short Course Schedule

SCHEDULE

Landscape Irrigation Auditing and Management

**Ft. Worth**
July 13-14
Thursday 8:30 am - 5:00 pm
Friday 8:15 am - 4:45 pm

**San Marcos**
July 27-28
Thursday 9:00 am - 5:30 pm
Friday 8:15 am - 4:45 pm

LIA Certification Exam

**Ft. Worth**
July 14 ~ 5 pm

**San Marcos**
July 28 ~ 5 pm

Irrigation CAD Workshop

**College Station**
August 14-15
Monday 10:00 am - 6:30 pm
Tuesday 8:15 am - 4:45 pm

GPS for Landscape Irrigation

**College Station**
August 18
9:00 am - 5:30 pm

Electrical Wiring and Safety for Landscape Irrigation

August 25 - all locations
8:30 am - 5 pm
(9:30 am - 6 pm El Paso)

**College Station and by TTVN to:**
Dallas, El Paso, Weslaco, San Antonio, Houston, Amarillo

This course will originate in College Station and be broadcasted by the Texas Tele-Video Network to other locations. TTVN allows two-way audio/video communications between sites.

CONTINUING EDUCATION CREDIT

TCEQ (Texas Commission on Environmental Quality) continuing education credits for Licensed Irrigators:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Electrical Wiring and Safety for Landscape Irrigation</td>
<td>8 hours</td>
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<tr>
<td>Irrigation Auditing and Management</td>
<td>16 hours</td>
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<tr>
<td>GPS for Landscape Irrigation</td>
<td>8 hours</td>
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<tr>
<td>Irrigation CAD Workshop</td>
<td>16 hours</td>
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COURSE LOCATIONS

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
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<tbody>
<tr>
<td>College Station</td>
<td>Texas A&amp;M University Scoates Hall, 979-845-5614</td>
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<tr>
<td>Ft. Worth</td>
<td>Tarrant County Resource Connection 2300 Circle Drive</td>
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<tr>
<td>Weslaco</td>
<td>Texas A&amp;M Research and Extension Center 2401 E. Hwy 83, 956-969-5639</td>
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<tr>
<td>El Paso</td>
<td>County Extension Office 1030 N. Zaragosa, 915-859-7725</td>
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<tr>
<td>San Antonio</td>
<td>County Extension Office 3355 Cherry Ridge, 210-467-6575</td>
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<tr>
<td>San Marcos</td>
<td>San Marcos Activity Center 501 East Hopkins</td>
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<tr>
<td>Houston</td>
<td>Texas A&amp;M Research and Extension Center 3033 Bear Creek Drive, 281-855-5600</td>
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<tr>
<td>Dallas</td>
<td>Agricultural Extension and Research Center 17360 Coit Rd</td>
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<tr>
<td>Amarillo</td>
<td>Amarillo Research and Extension Center 6500 Amarillo Blvd West, Room 190</td>
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*Additional course location information and directions will be sent with registration confirmation and will be posted at: [http://irrigation.tamu.edu](http://irrigation.tamu.edu).*

COURSE SPONSOR

Landscape Irrigation Auditing and Management is being offered in San Marcos in cooperation with the City of San Marcos Water Department and Ft. Worth with the Tarrant County Extension office.

TEXAS A&M SCHOOL OF IRRIGATION

The School of Irrigation is a program of the Irrigation Technology Center, Texas A&M University System, under the direction of Dr. Guy Fipps. Courses are administrated through the Texas Cooperative Extension and the Biological and Agricultural Engineering Department at Texas A&M University in College Station. Instructors are Guy Fipps and Kendall Chilek. We welcome comments and suggestions on classes and scheduling. Customized training programs and research services are also available. All proceeds from our short courses go to support education and research programs in landscape irrigation.

Educational programs conducted by the 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. April 2004.
Irrigation CAD Workshop

This two-day, 16 hours class provides complete instruction on the use of CAD based design software for system design. Students will gain a functional knowledge of the most commonly used software, and leave the class able to use one for design and specifications purposes. Topics include the menu system of the software, use of the sprinkler database for selection and locating heads, completing and importing site drawings, assigning zones, manual and automatic pipe sizing, hydraulic calculations, and producing material and cost estimates. Instruction will take place in a computer lab at Texas A&M University. Enrollment is limited. Students should be familiar with personal computers using the Windows operating system. No experience in computer-aided design is required.

Electrical Wiring and Safety for Landscape Irrigation

This course covers the basic science of electricity and how to safely wire and troubleshoot the electrical system supplying an irrigation system. Students are introduced to the principles describing how electricity and electrical circuits "work" and learn how to use these principles to safely troubleshoot electrical system problems. Students also learn how to size wires and install systems for different environments according to the National Electric Code requirements. Other topics include electrical safety of installers and users, human response to electricity, personal protective equipment and their use, and OSHA requirements.

GPS for Landscape Irrigation

The course presents general topics in the use of GPS (Global Positioning Systems) as it applies to Landscape Irrigation Practices. The course will cover such topics as general use of GPS and how GPS can be applied to landscape Irrigation Systems. The student will gain knowledge in general GPS use and site mapping. The eight hour course will take place in a computer classroom setting with lectures and class discussion including a section that will be taught in an outdoor setting.

Landscape Irrigation Auditing and Management

This two-day course provides instruction on irrigation system auditing and how to develop irrigation schedules that conserve water while promoting quality landscapes. Students gain “hands-on” experience by performing three audits, and learn auditing procedures for identifying problems and system troubleshooting, conducting catch can tests, determining soil type and root depth, and producing auditing reports. Students learn how to use ET (evapotranspiration) to produce irrigation schedules.

Software and Manual
Registration includes copies of the Irrigation Auditing Manual and the Texas Landscape Irrigation Auditing and Scheduling Software. The software is available only to course participants.

LIA Certification
Persons who complete the auditing course are eligible to take the Texas Irrigation Auditor Certification Exam to become Texas Certified Landscape Irrigation Auditors. Upon passing the exam, you will receive a certificate acknowledging this achievement and be listed in our directory of certified auditors. Note: there are currently no clear regulations governing auditing in Texas, and certification is voluntary.

What to Bring....
A calculator, pen and pad for taking notes. Students in the Auditing and GPS classes should wear appropriate clothes and shoes for field activities.

For More Information...
Course contents and local arrangements:
Kendall Chilek, 979-845-5614, kjchilek@tamu.edu
Registration: Kay Sanders, 979-845-7694

Visit Us on the Web....
Irrigation Technology Center: http://itc.tamu.edu
TexasET Network : http://texaset.tamu.edu
Provides daily weather and ET data for over 20 locations in Texas and contains interactive calculators for determining irrigation needs and runtimes for turf, landscapes and agricultural crops. The site contains historic rainfall and ET rates for 19 Texas cities and other resources related to water and irrigation.
Texas A&M School of Irrigation: http://irrigation.tamu.edu
Includes locations and schedules for upcoming classes, complete course descriptions and other information.