TEXAS A&M SCHOOL OF IRRIGATION
2005 Summer Short Course Schedule

SCHEDULE

Landscape Irrigation Auditing and Management

San Marcos August 2-3
Tuesday 9:00 am - 5:30 pm
Wednesday 8:30 am - 5:00 pm

LIA Certification Exam
San Marcos August 3 ~ 5 pm

Automated Weather Stations for Landscape Irrigation

College Station August 11 10am - 6:30pm

Introduction to Irrigation Design Software

College Station August 12 10am - 6:30pm

Irrigation CAD Workshop

College Station August 18-19
Thursday 10:00 am - 6:30 pm
Friday 8:15 am - 4:45 pm

Electrical Wiring and Safety for Landscape Irrigation

August 25 - all locations 8:30 am - 5 pm

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

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>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Wiring and Safety for Landscape Irrigation</td>
<td>8 hours</td>
</tr>
<tr>
<td>Irrigation Auditing and Management</td>
<td>16 hours</td>
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<tr>
<td>Intro to Irrigation Design Software</td>
<td>8 hours</td>
</tr>
<tr>
<td>Irrigation CAD Workshop</td>
<td>16 hours</td>
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<tr>
<td>Automated Weather Stations</td>
<td>8 hours</td>
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COURSE LOCATIONS

College Station
Texas A&M University
Scoates Hall, 979-845-5614

Dallas
Texas A&M Research and Extension Center
17360 Coit Road, 972-231-5362

Weslaco
Texas A&M Research and Extension Center
2401 E. Hwy 83, 956-969-5639

El Paso
County Extension Office
1030 N. Zaragosa, 915-859-7725

San Antonio
County Extension Office
3355 Cherry Ridge, 210-467-6575

San Marcos
San Marcos Activity Center
501 East Hopkins

Houston
Texas A&M Research and Extension Center
3033 Bear Creek Drive, 281-855-5600

Additional course location information and directions will be sent with registration confirmation and will be posted at:
http://irrigation.tamu.edu.

COURSE SPONSOR

Landscape Irrigation Auditing and Management is being offered in Lubbock in cooperation with the City of San Marcos Water Department.

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.
Introduction to Landscape Design Software

This 8 hour class provides an overview of the use of personal computers and software for irrigation system design. Students will receive hands-on experience using common irrigation design software to solve landscape irrigation design problems. 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.

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.

Automated Weather Stations for Landscape Irrigation

This course will cover the operation of automated weather stations and their application in promoting irrigation water conservation. Students will learn basic psychometric (or climatic) relationships that influence water demand, electronic terminology, and soil-water-plant relationships for proper irrigation water management. Topics include selection of sensors, data loggers, power supplies and peripheral equipment necessary for downloading and transmitting weather data. Instruction will cover guidelines for installing, calibrating and maintaining weather stations to ensure data quality control. Other topics will include use of weather stations and potential evapotranspiration (PET) networks for automated irrigation scheduling.