

**American Rainwater Catchment Systems Association**  
**Professionals Accreditation**  
**Course Agenda**

**Friday February 27, 2009**

- 9:00 -10:00 a.m.      Registration (Distribute Knowledge Assessment).....Kniffen**  
A pre-course examination will determine the knowledge level of each participant prior to going through the course. The pre-course exam results will be compared to post-course exam results to assess impact/knowledge gained.
- 10:00 – 10:30 a.m.      Introduction.....Kniffen**  
This session will provide the group (1) the opportunity to introduce themselves and the rainwater industry they are involved with, (2) information on facilities ground rules, (3) an overview of the course, its purpose and structure, (4) a brief discussion of the water quality and quantity issues facing Florida and the Nation, and (5) review who ARCSA is and their mission. It will provide an introduction to the *Rainwater Harvesting Planning and Installation (Manual)* and Workbook containing power points.
- 10:30 – 11:30 a.m.      Rainwater, Watersheds and Stormwater.....Kniffen**  
Provide a visual demonstration of rainfall and where the water goes using a rainfall simulator. Discussions on nonpoint pollution, urban stormwater runoff and methods to reduce runoff through passive collection methods will be discussed as outlined in chapter 2 of the Manual. Also a brief introduction to a complex system and rainwater uses will be discussed as outlined in Chapter 3.
- 1:30 – 12:00 p.m.      The Planning Process- Business Ethics, Safety and Planning.....Kniffen**  
This session will describe practical business ethics and expectations of a professional. Safety concerns for the employees and construction sites will also be discussed along with assessing a location, working with clients and developing bids and contracts as outlined in the Manual in Chapters 4,5 and 6.
- 1:00 – 3:00 p.m.      Rainwater Collection – Rooftop to Catchment Container for Outside Use.....Kniffen/Lye?**  
This session will review rainfall amounts, patterns, dry spells, flooding and then work through the process of calculating and the amount of water that could be captured (supply) and how much water is needed (demand). This will be followed by basic construction of a rainwater collection system from roof through gutters, downspouts, screens, diversions, storage containers and all connections through the catchment process. These are outlined in the manual in Chapters 7, 8, 9, 10, 11, 12, 13, 14, and 15.
- 3:00 – 4:00 p.m.      Rainwater harvesting - In-Home Use From Roof Through Point-Of-Use...Lye/Boulware/K.**  
This session will cover additional precaution on roof, gutters, first flush and diversions, storage containers, filters, sanitation methods needed for in-home non-potable and potable uses. Also pathogens and other contaminants of concern as outlined in the manual in Chapter 15 and 16.
- 4:00 – 4:30 p.m.      Rainwater System Maintenance.....K./Lye/Boulware**  
The biggest challenge is developing a system that customers will maintain and care for. The system must be easy to maintain. The installer should provide the customers with a booklet

outlining maintenance, check sheet with schedule and specific maintenance responsibilities, a trouble shooting checklist, a product list with warranties, resources and contact information. Also installers may develop a maintenance contract with customers to also check and maintain an installed system as outlined in Chapter 18.

**4:30 – 5:00 p.m.**      **Review, Questions/Answers, Knowledge Assessment/Course Evaluation.....Team**  
A post-course evaluation will be distributed and the results compared to the pre-course exam in order to determine course impact and knowledge gained. Those completing only the first day of training will receive certificates for 7 hours of training.

## **Saturday February 28, 2009**

**8:30 – 9:30 a.m.**      **Introduction and Review Installation manual.....Kniffen**  
This day is devoted to more complex calculation, reviewing resources and constructing a Rainwater Collection System This first session provides an introduction to the *Rainwater Harvesting Planning and Installation* (Manual) and Workbook containing power points for those who did not attend first days sessions (already completed such sessions earlier). It will also review the first day workshop and answer questions.

**9:30 – 10:30**      **Calculating From Rainfall through Storage, Supply and Demand.....Boulware/K.**  
This session will look at doing an inventory to develop a proposal and determining how much rainwater could be captured and how much demand there is. Actual problems will be solved.

**10:30 – 11:30 a.m.**      **Stormwater issues and solutions.....Kniffen**  
This session will look in-depth in both passive and complex systems to reduce urban stormwater runoff and construct a mock rain garden, underground chambers, overflow management and touch on landscape design. Also flooding and hurricane concerns will be discussed.

**11:30 – 12:00 noon**      **Review of Containers, Products and Methods.....Team**  
This session will review some of the products on the market, web sites and resources.

**1:00 – 2:30 p.m.**      **Hands-on Construction of a Rainwater Collection Systems.....Team**  
This session will demonstrate the construction of a rain barrel, wildlife guzzler, drip irrigation system using gravity pressure, and using the rainwater for landscape, wildlife, bird bath, livestock and in-home potable and non-potable use.

**2:30 -3:00 p.m.**      **Review, Questions, Final Course Assessment/Course Evaluation and certificates.....Team**  
A review of all sessions, question and answer period and a post-course examination will be administered and the results compared to the pre-course exam in order to determine course impact and knowledge gained. A course evaluation will also be administered to gain feedback on how to improve the course. Certificates for additional 5.5 hours will be distributed as the class turns in post-course exam and course evaluations.

**3:00 p.m.**      **Adjourn**