RIA Water Loss Specialist Course Overview

- **Chapter 1: Standards and Regulations**
  - Framing the Session
  - Indoor Air Quality & Weather Intrusion
  - Microbial Contamination & Control Strategies
  - Microorganisms & Health Effects
  - IAQ Remediation
  - Evaluating a Situation with Potential Microbial Contamination – Full Hazard Assessment (Containment, PPE, work procedures, etc.)
  - Evaluation Efficacy of Microbial Cleanup Actions

- **Chapter 2: Safety**
  - Four Option for Safety Training
  - OSHA
  - Regulatory (reg) Compliance
  - Usefulness of Health & Safety regulations
  - ERP (Emergency Response Plan)
  - FPP (Fire Prevention Plan)
  - Equipment Maintenance
  - Fire Hazards/Equipment
  - Electrical Hazards
  - LOTO
  - Confined Space Safety (CSEP)
  - General Requirements Hazard Assessment
    - Worker Training
    - Eye & Face Protection
    - Respiratory Protection
    - Head Protection
    - Foot/Hand Protection

        - etc.
    - Bloodborne Pathogens

- **Chapter 3: Psychrometry & Drying Techniques**
    - Psychometry Overview
    - Air & Energy
    - Critical Laws
    - Psychrometric Chart Overview and Examples
        - Dry bulb temperature
        - Humidity Ratio
        - Dew point temperature
        - Vapor pressure
        - Absolute expressions of humidity in the air
        - Vapor Content capacity of air
        - Relative Saturation = Relative Humidity
        - Ambient Conditions
    - Humidity Control, Air Movement, Heat (energy)
    - Air Management for Drying Project
    - Drying Rate Stages

- **Chapter 4: Antimicrobial Chemicals**
    - The 3 Classes of Biocides Sanitizers, Disinfectants & Sterilants
    - Biocidal Activity (and types of Biocides)
    - Static Agents
    - Regulation, Licensing and Registration
    - Scale of Microbial Resistance
    - Proper Use of Antimicrobials
    - Inhibitors or Static Agents

- **Chapter 5: Building Structures & Dynamics**
    - Thermal Energy Control
        - How Insulation “Works”
    - Building dynamics and drying
        - Vapor Barriers
        - Condensing Surfaces
    - Atmospheric influences on drying
        - HVAC
        - Stack Effect
    - Pressurizations

- **Chapter 6: Drying Equipment & Instruments**
    - Purpose & types of measurements needed

- Determining potential for mold growth
- Psychrometric Readings
  - Types of instruments
  - Comparing TH Meters
  - Verifying TH Meters
- Moisture readings
  - Penetrating meters – comparing and suggestions
  - Non-penetrating – comparing, issues and suggestions
  - Verifying / calibrating moisture meters
- Observations

- **Chapter 7: Microbial & IAQ Issues**
  - Indoor Air Quality & Water Intrusion
  - Classifying Indoor Contaminants
  - Microbial Contamination
  - Microbial Control Strategies
  - Bacteria, Viruses, Fungi and Dust Mites
  - Microorganisms & Health Effects
  - IAQ Remediation Approaches
  - Evaluating a Situation with Potential Microbial Contamination
  - Inspection Tools
  - Indoor Environmental Professionals (isolating areas, PPE, etc.)
  - Microbial Remediation Procedures
  - Containment and Nomenclature
  - Evaluation Efficacy of Microbial Cleanup Actions

- **Chapter 8: Drying of Building Materials**
  - Round table
  - Open Discussion: Drying Strategies and Concerns
  - Moisture Gradients
  - EIFS (Exterior Insulated Finish System)
  - Testing Instruments

- **Chapter 9: Operations (Scoping & Estimating Water Losses)**
  - Definition of Terms
  - Project Managers & Estimators
  - Role of the Project Manager
    - Initial Report
    - Inspection
    - Emergency Scope
    - Estimating Software
    - Emergency Services Invoice
    - Writing the Scope

        - Writing the Estimate
        - Scope “recon”
        - The Bid
    - O&P Trends
    - Computer Generated Estimates

- **Chapter 10: Legal & Ethical Issues**
    - Litigation Process
    - Legal Issues
    - Negligence
    - Causation
    - Damages
    - Contracts
    - Risk Management Considerations
    - Science and Medicine
    - Legislative & Regulatory Issues
    - Liability (and Liability Insurance)
    - FIFRA
    - IAQ Health
    - WLS Code of Ethics

- **Chapter 11: Drying of Contents**
    - Impact of Water Intrusion
    - General Process of Evaluating, Inventorying, Pack-Out Transporting and Tracking Contents
    - Contents and Contents Components
    - Identifying Period Pieces and Antiques
    - Cleaning Textiles, Leather, Rugs, Electronics, Books
    - Freezing Wet Books or Documents
    - Art Restoration
    - Drying Contents by Restorative Drying
    - Specialty Environments, Corrosion, Control and EMC