Color Key: Day 1; Day 2; Breaks; Lab

Day one (Wednesday)

7:30AM Room 103
Sponsor Setup, Check-in, and Continental breakfast. (Sponsors may also set up Tues afternoon)

8:30-10AM Classroom 121
Introduction (of instructors)
Course overview and objectives
Cleaning basics
  Why clean?
Cleaning is a process
What makes soil stick
Solvent cleaning

10-10:30AM Break, Room 103
Interaction with Experts

10:30-11:15 AM Lab Room 107
Hands-on exercises
• Comparisons of soils and cleaning solutions
• Documentation of cleanliness and surface energy
• Introduction to the Hansen solubility parameters

11:15 AM-Noon Classroom 121
Aqueous cleaning
“Non-chemical” cleaning
Assembling your cleaning team

Noon-1PM Lunch Room 121
Table discussion topics:
Tell the table something unique or difficult about your surface, soil, cleaning system, or specifications.

1-2 PM Classroom 121
Materials compatibility
Choosing the cleaning process

2 - 2:45 PM Lab Room 107
Hands-on exercises
• Particle collection with filters and wipes
• Computerized particle counting and characterization
• Solvent Characterization and the wetting index
Cleaning Workshop Course Outline
May 16-17, 2018
Sam Houston State University
Huntsville, Texas

2:45-3:10 PM Break, Room 103
Interaction with Experts

3:10 -5PM Classroom 121
Testing chemicals and processes
Working with chemical and equipment suppliers
Safety and environmental considerations

5-6:30PM CFS Foyer
Networking reception hosted by Chemours, with beer, wine, and appetizers

7-8:30PM Austin Hall
Workshop Dinner

Day Two (Thursday)
7:30-8AM CFS Foyer
Continental breakfast.

8-9:30AM Classroom 121
Specific industry concerns
   - Optics, Automotive, Other
Cleanrooms, controlled environments
How clean is clean enough?

9:30-10AM Break, Room 103
Interaction with Experts

10-10:45 AM Lab Room 107
Demonstrations/ Hands-on exercises
   - Ultrasonic cleaning – testing effectiveness with aluminum foil
   - High velocity spray cleaning with steam
   - Testing rinse effectiveness with pH

10:45 AM-Noon Classroom 121
Verification, acceptance testing
   - In-house, outsourced
Analytical testing
Cleaning, extraction, separation
Process monitoring
Surface tests
Working with the lab

Noon-12:45PM Lunch Room 121
Cleaning Workshop Course Outline
May 16-17, 2018
Sam Houston State University
Huntsville, Texas

12:45-1:30PM Lab Room 107
Demonstrations/ Hands-on exercises
- Ultrasonic Cleaning – comparing acid, base, water, and surfactant formulations
- Vapor degreasing – demonstration and discussion
- Spectroscopic techniques – FTIR, Raman, Fluorescence of surfaces and solvents

1:30-2:45PM Classroom 121
Standards and controls
Customer requirements and constraints
The value of an educated workforce
What do you do if something goes wrong?
You, your customers, your supply chain

2:45-3:00 PM Break, Room 103
Interaction with Experts

3:00-3:45PM Classroom 121
Course Completion Quiz and Evaluation