5 Day AGENDA

Daily AM breaks: 10:00AM-10:15AM
Daily Lunch: 12:30PM-1:00PM
Daily PM breaks: 3:00PM-3:15PM

Monday, November 10, 2014:
8:30 - 10:30  Introductions & Contracting in NC -Permitting/License requirements  Mike Smith
10:30 - 10:45  Break
10:45- noon  Solar Thermal Applications  William Guiney
12:00 - 1:00  Lunch
1:00 – 2:00  Site Assessments
2:00 – 2:30  Solar Water Heating System Types
2:30 - 2:45  Break
2:45 - 4:30  Solar Water Heating System Types Cont.
4:30 - 5:00  Wrap-up Q&A

Tuesday, November 11, 2014:
8:30 - 10:15  System Components  William Guiney
10:15 - 10:30  Break
10:30 - 12:00  Components cont.
12:00 - 1:00  Lunch
1:00 - 2:30  Mounting and Roof Penetrations (Mounting 12)
2:00 - 2:30  STEP Mounting Video
2:30 - 2:45  Break
2:45 - 3:30  Piping & Flow Rates (Piping & Flow 12)
3:30 – 4:30  Pipe Sizing (Pipe Sizing Dec 2012)
4:30 - 5:00  Wrap-up Q&A

Wednesday, November 12, 2014
8:30 - 10:00  Pump Sizing  William Guiney
10:00 - 10:30  Certifications SRCC OG100/OG-300
10:30 - 10:45  Break
10:45 - 12:00  OSHA Review & NABCEP (Web site review)
12:00 - 1:00  Lunch
1:00 - 2:30  System Startup, Document Transfer & O&M Manuals
2:30 - 3:00  Charging Glycol System Video  Dan Gretsch
3:00 - 3:15  Break
3:15 - 3:45  SDHW System Sizing Software & Economics  Dan Gretsch/W. Guiney
3:45 - 4:45  Polysun Training & Demo – Insight for Business Development  Daniel Gretsch
4:45 - 5:00  Wrap-up Q&A

Thursday, November 13, 2014:
08:30 - 9:30  Safety Considerations  William Guiney
09:30 – 10:30  System Types Review Heating
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 - 10:45</td>
<td>Break</td>
</tr>
<tr>
<td>10:45 - 12:00</td>
<td>System Types Review Cont.</td>
</tr>
<tr>
<td>12:00 - 1:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 - 3:00</td>
<td>Swimming Pools</td>
</tr>
<tr>
<td>3:00 - 3:15</td>
<td>Break</td>
</tr>
<tr>
<td>3:15 - 5:15</td>
<td>NABCEP Study Guide Review &amp; Wrap-up</td>
</tr>
</tbody>
</table>
Friday, November 14, 2014:

8:30 - 9:00  Graduate Presentations

9:00 - 10:45:

1. Solar Labs PPT Presentation: Fred Stewart
   1. Tools
   2. Working with Copper pipe
   3. Collectors
   4. Controls
   5. Pumps
   6. Roof Penetrations and Mounting Hardware and Flashings

2. Safety Prep

10:45 - 11:00  Break
11:00 - 12:00  Install of pressurized glycol and drainback ST systems/ soldering, flashing lab station
12:00 - 1:00  Lunch
1:00 - 3:00  Install of pressurized glycol and drainback ST systems/ soldering, flashing lab station

3:00 - 5:30  OPTION A:  NABCEP EL Solar Thermal Exam
              OPTION B:  Troubleshooting Exercises-Activity sheet