KINE 2320 Introduction to Athletic Training
Cryotherapy Lab

Objectives:
1. The student will learn and practice the following modality application procedures:
   a. ice bag
   b. ice towel
   c. ice massage
2. The student will evaluate the relative effectiveness of various cold modalities in decreasing the skin surface temperature.
3. The student will explore and describe the sensations experienced during a 10-minute immersion.

Materials Needed:
   - Surface temperature gauge
   - Plastic bag
   - Flex-wrap
   - Towel
   - Ice
   - Wet wrap

LAB ACTIVITY #1
Procedures:
1. Make an ice bag by placing ice in a plastic bag, removing the air from the bag, and tying the bag shut.
2. Using flex-wrap, secure the ice bag to the following locations on your partner:
   a. lateral ankle
   b. anterior knee
   c. lateral shoulder
   d. medial elbow
3. Repeat steps 1 and 2 with your partner now applying ice to you.

Partner verification of ice/compression:

<table>
<thead>
<tr>
<th>Location</th>
<th>Secure</th>
<th>Too tight?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lateral ankle</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Anterior knee</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Lateral shoulder</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Medial elbow</td>
<td>______</td>
<td>______</td>
</tr>
</tbody>
</table>
LAB ACTIVITY #2

Procedures:
1. Prepare an ice immersion bucket.

2. Instruct your partner to submerge his/her foot/ankle into the bucket, after applying a toe cap for comfort.

3. Record your partner’s reported sensations throughout the 10 minute treatment.

<table>
<thead>
<tr>
<th>Time</th>
<th>Sensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____</td>
<td>cold</td>
</tr>
<tr>
<td>_____</td>
<td>burning</td>
</tr>
<tr>
<td>_____</td>
<td>aching</td>
</tr>
<tr>
<td>_____</td>
<td>pin &amp; needles (tingling)</td>
</tr>
<tr>
<td>_____</td>
<td>numbness</td>
</tr>
</tbody>
</table>

LAB ACTIVITY #3

1. Using the surface temperature gauge, record the baseline skin temperature of the surface area to be evaluated.

2. Record this reading on the chart provided and, using a straight edge, mark this line across the grid. This is your baseline.

3. Apply the cold modality to the body part in the prescribed manner for a total of 10 minutes.

4. Record skin temperature every 2 minutes.

5. On removing the modality, measure the skin temperature and record this at the “10-minute” mark on the chart.

6. Repeat step 4 for ten minutes or until the skin temperature returns to baseline.