ACTIVE ISOLATED STRETCHING & STRENGTHENING
The Neck and Shoulder
Instructor: Dr. Ben E. Benjamin

Shoulder Stretching Protocol
1. Horizontal
2. Hyper extension
3. Horizontal clap in back
4. Triceps
5. Rotations
6. Adduction
7. Elevation

Warm up circles

1. Horizontal Abduction: pectoralis major and minor, subscapularis, anterior joint capsule

Horizontal abduction at 90°

Horizontal abduction at 135°
(alternate position over elbow)
Horizontal abduction 1 (45°)

Double horizontal abduction 1 (90°)

Single arm horizontal abduction 2
(one hand folded behind the neck):
pectoralis minor

Horizontal abduction 2
(hands folded behind the neck):
pectoralis minor

2. **Hyper-extension Single Arms:** biceps, pectoralis major and minor, anterior deltoid, supraspinatus

Straight back
thumb up

Straight back
palm up

Straight back
palm down

Straight back
rotate thumb down
Back with thumb up, out to 45°
Back with palm up, out to 45°
Back with palm down, out to 45°
Back with thumb down, out to 45°
Reach behind thumb up, crossed 45°
Reach behind palm up, crossed 45°
Reach behind palm down, crossed 45°
Reach behind thumb down, crossed 45°
3. Hyper-extension both arms: biceps, pectoralis major and minor, anterior deltoid, supraspinatus

Hands clasped and turned out 90° — 

Both hands parallel back and up

Horizontal abduction — posterior (clap in back) 195° — page 90

4. Triceps Stretch: triceps, serratus anterior and the anterior joint capsule

With arm parallel

With elbow to the side — page 95
5. Rotation

*External Rotation: subscapularis, pectoralis major, latissimus dorsi, and teres major*

With the upper arm at 95° sitting

With the upper arm at 95° standing — page 91

With the elbow into the side sitting (frozen shoulder) — page 90

Lying on a table facedown (using elbow and forearm) — page 91

*Internal Rotation: infraspinatus, supraspinatus, and teres minor*

With the upper arm at 95° sitting

With the upper arm at 95° standing — page 92

Lying on a table facedown (using elbow and forearm) — page 93
6. Horizontal Flexion (adduction): infraspinatus, teres minor, trapezius, rhomboid major and minor

Thumb up — page 94
Palm up
Palm down
Thumb down

45° down
Horizontal flexion 2 (elbow to throat) — page 94

7. Forward Elevation: triceps, posterior deltoid and anterior serratus

Straight arm — page 95
Sideward elevation thumb up — page 97
Thumb down — page 97

With the rope — page 95
Neck Stretching Protocol

Neck Sitting

Anterior semicircles (warm-up) — page 109

Cervical flexion — page 109

Cervical flexion at 45° rotation

Cervical anterior oblique (flexion): Rotate neck 45°, left ear to left chest 45° — page 112

Cervical lateral flexion 45–60° — page 110

Cervical hyper-extension (elbows on knees) 50°

Cervical posterior oblique extension (elbows on knees), ear to same side medial border 45°

Cervical rotation 90° — page 110
Shoulder Strength Protocol

Shoulder Girdle
- Elevation: supine (resisted shoulder shrug) — page 37, #1
- Depression: start in shoulder shrug, resist down (resisted elbow depression) — page 37, #2
- Shoulder abduction/protration: supine (round forward against resistance) — page 38, #3
- Shoulder adduction/retraction: prone (chin on table, arms side off table, retract shoulder blades) — page 38, #4

Shoulder Upper Arm (start with 1 or 2 pounds — 3 to 5 sets of 10)
- Forward flexion (sitting or standing raise arms to 90° and 180°) — page 39, #1
- Shoulder forward elevation (same to 180° on the table, head and arms off the table) — page 39, #2
- Abduction (sitting or standing 90°, then rotate hands up to 180°) — page 40, #3
- Hyperextension (sitting arms extend backward) — head is in slight flexion — page 40, #4

- Horizontal adduction: supine (on the table) — page 41, #5
- Pectoral press (hands in front of the shoulders, straighten the arms)
- Triceps (arms above at 90°, bend the elbows)
- Horizontal abduction: prone (on the table/arms off table, arms up to the side, head up) — page 41, #6
- Single arm horizontal extension (arm off the table to the side, head off also, bend elbow) — page 42, #7
- Shoulder girdle adduction: prone (elbows up and back) — page 42, #8

- External shoulder rotation: side-lying — page 42, #9
- External shoulder rotation: prone (two arm elbows bent rotation) — page 43, #10
- Internal shoulder rotation: side-lying (bottom arm medial rotation) — page 43, #11
- Internal shoulder rotation: prone (both arms at once) — page 44, #12

- Shoulder forward elevation: prone (at 45°, thumbs up) — page 44, #13
- Shoulder horizontal extension with internal rotation: prone (arms side/internal rotation) — page 45, #14
- Supraspinatus exercise (sitting or standing — internally rotate, bring forward at 45°) — page 45, #15
- Winged scapulae stabilization (standing leaning against wall, shoulder blades together) — page 45, #16
- Scapula stabilization: supine (arms crossed in front — extended raise and lower shoulders) — page 46, #17
- Shoulder shrug no weights (sitting or standing — shoulders forward, up, back, relax) — page 47: 1, 2, 3, 4
Neck Gravity (lying on table)
- Cervical flexion: supine — page 30, #5
- Cervical flexion: supine, at 45° — page 31, #6
- Cervical flexion: oblique (right ear to right chest) — page 31, #7

- Cervical lateral flexion: side-lying — page 31, #8
- Cervical rotation: side-lying — page 30, #4
- Cervical hyperextension: prone — page 29, #1
- Cervical hyperextension: oblique — page 29, #2
- Cervical rotation: prone (no photo)
Seated Trunk Stretches

**Sitting Trunk Flexion**
Erector spinae and sacrospinalis

**Lateral Trunk Flexion**
Lateral spine flexors, quadratus lumborum (lateral), obliques, and erector spinae

**Seated Trunk Rotation** — page 141
Thoracic and lumbar rotators

**Lateral Trunk Flexion Forward Oblique**
*(hand behind head, rotate, left shoulder to left knee)*
Serratus posterior, latissimus dorsi, and posterior quadratus lumborum

**Thoracic Lumbar Rotation with Forward Bend** — page 142
*(hands behind head, rotate, left shoulder to right knee)*
Rotatores, erector spinae, and sacrospinalis

**Thoracic Extension Posterior Oblique**
*(leaning onto table 45° rotation and bend backward)*
Rectus abdominus, internal obliques, external obliques, intercostals, and anterior serratus
The Shoulder

Circumduction (warm-up)
Horizontal Abduction 1 (90°, 135°, 45°)
(alternate position over elbow at 135°)
Double Horizontal Abduction 1 (90°)
Horizontal Abduction 2 (hands folded behind the neck)

Hyper-extension Single Arms, 90°
• Straight back, thumb up
• Palm down
• Palm up
• Thumb down
• Out to 45°, thumb up
• Out to 45°, palm up
• Out to 45°, palm down
• Out to 45°, thumb down
• Reach behind, thumb up, crossed 45°
• Reach behind, palm up, crossed 45°
• Reach behind, palm down, crossed 45°
• Reach behind, thumb down, crossed 45°

Hyper-extension Hands Clasped (turned out) 90°
Both hands parallel and back and up
Horizontal Abduction – posterior (clap in back)
Triceps Stretch 15°
- With arm parallel
- With elbow to the side

External Rotation 80°
- Down on knee: With the upper arm at 90° sitting
- Down on knee: With the upper arm at 90° standing

Internal Rotation 90°
- Down on knee: With the upper arm at 90° sitting
- Down on knee: With the upper arm at 90° standing

Horizontal Adduction 90°
- With thumb up
- With palm up
- With palm down
- Full rotation thumb down
- Elbow to throat

Forward Elevation
- Thumb up with arm straight

Sideward Elevation 15°
- Palm forward and thumb down
The Neck (sitting)

Anterior Semicircles (warm-up)

Cervical Flexion – Chin to chest

Cervical Flexion at 45° rotation - Chin to mid-breast

Cervical Anterior Oblique (Flexion)
  Rotate neck 45°, left ear to left chest

Cervical Lateral Flexion – Ear to shoulder

Cervical Extension (elbows on knees), look up

Cervical Posterior Oblique Extension (elbows on knees), ear to same side shoulder blade, 45°

Cervical Rotation 90° - Rotate the head
Neck Gravity (lying on table)

Cervical Flexion: Supine

Cervical Flexion: at 45° Supine

Cervical Flexion: Oblique (right ear to right chest)

Cervical Lateral Flexion (side-lying)

Cervical Rotation (side-lying)

Cervical Hyperextension (prone)

Cervical Hyperextension Oblique

Cervical Rotation (prone)
Shoulder Stretching Protocol
G = Range of motion goal; LA = Lift angle

Warm up circles

8. Horizontal Abduction: pectoralis major and minor, subscapularis, anterior joint capsule
Horizontal abduction at 90°, G:90° (180° front to back)

Horizontal abduction at 135°, G:45°

Horizontal abduction 1 at 45°, G: 90°
Double horizontal abduction 1 at 90°, G: 90° (180° front to back)

Single arm horizontal abduction 2 (one hand folded behind the neck), G: 45°: pectoralis minor

Horizontal abduction 2 (hands folded behind the neck), G: 45°: pectoralis minor

Straight back thumb up

Straight back palm up

Straight back rotate thumb down

Straight back palm down
Back with thumb up, out to 45°

Back with palm up, out to 45°

Back with palm down, out to 45°
Back with thumb down, out to 45°

Reach behind thumb up, crossed 45°

Reach behind palm up, crossed 45°, G:90° with the hand behind the opposite shoulder
Reach behind palm down, crossed 45°

Reach behind thumb down, crossed 45°

10. **Hyper-extension both arms: biceps, pectoralis major and minor, anterior deltoid, supraspinatus**

Hands clasped and turned out 90°, G:90° — *page 89*
Both hands parallel back and up (transition movement only)

Horizontal abduction — posterior (clap in back), G:195° (hands touch at shoulder height) — page 90

11. Triceps Stretch: triceps, serratus anterior and the anterior joint capsule, G:15°
With arm parallel
With elbow to the side — page 95
12. Rotation

External Rotation: subscapularis, pectoralis major, latissimus dorsi, and teres major

With the upper arm forward 5º and the elbow bent at 95º, G:90º

With the upper arm at 95º standing — page 91

With the elbow into the side sitting (frozen shoulder), G:90º — page 90

Lying on a table facedown (using elbow and forearm), G:90º — page 91
**Internal Rotation: infraspinatus, supraspinatus, and teres minor**

With the upper arm forward 5° and the elbow bent at 95° sitting, G:90°

With the upper arm at 95° standing — page 92

Lying on a table facedown (using elbow and forearm) — page 93
13. Horizontal Flexion (adduction): infraspinatus, teres minor, trapezius, rhomboid major & minor, G: 90°

Thumb up — *page 94*

Palm up

Palm down

Thumb down

45° down
Horizontal flexion 2 (elbow to throat) — page 94

14. Forward Elevation: triceps, posterior deltoid and anterior serratus

Straight arm, G:15° beyond vertical — page 95

Sideward elevation thumb up, G:15° beyond vertical — page 97

Thumb down — page 97

With the rope, G:fist to the lower scapula — page 95
Neck Stretching Protocol

Anterior semicircles (warm-up), page 109

Cervical flexion, G: chin to chest, page 109

Cervical flexion at 45° rotation, G: chin to chest

Cervical anterior oblique (flexion): Rotate neck 45°, left ear to left chest G:45° — page 112
Cervical lateral flexion, G:45–60° — page 110

Cervical hyperextension (elbows on knees), G:50–60°

Cervical posterior oblique extension (elbows on knees), ear to same side medial border, G:45°
Cervical rotation, G:90° — page 110
Please give us your honest feedback!

<table>
<thead>
<tr>
<th>Question</th>
<th>5-Excellent</th>
<th>4-Very Good</th>
<th>3-Good</th>
<th>2-Fair</th>
<th>1-Poor</th>
<th>N/A</th>
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<tbody>
<tr>
<td>1. How would you rate the workshop overall?</td>
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<td>2. How would rate the instructor?</td>
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<td>3. How would your rate the quality of the facilities?</td>
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<td>4. How would you rate the quality of the handouts and manuals?</td>
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<td>5. Did this workshop achieve its stated goals?</td>
<td>Yes</td>
<td>Somewhat</td>
<td>No</td>
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<td>6. Did the workshop meet the expectation stated in the flier?</td>
<td>Yes</td>
<td>Somewhat</td>
<td>No</td>
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<td>7. How was the pacing?</td>
<td>Too Fast</td>
<td>Just Right</td>
<td>Too Slow</td>
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<td>8. How was the amount of hands-on work?</td>
<td>Too Little</td>
<td>Just Right</td>
<td>Too Much</td>
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<td>9. How were the breaks?</td>
<td>Too Few</td>
<td>Just Right</td>
<td>Too Many</td>
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<td>10. How would you rate the usefulness of the hands-on work?</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
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<td>11. Was there enough personal attention given?</td>
<td>Yes</td>
<td>No</td>
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<td>12. List anything you particularly liked about the workshop:</td>
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<td>13. List anything you particularly did not like:</td>
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