Objectives:

- Be able to identify the goals of a progressive mat program preparing a patient/client for ambulation
- Be able to identify the four stages of motor control and how they can be incorporated into a preambulation mat program
- Be able to take a patient/client through the developmental sequence

Pre-ambulation mat program and progression goals:

- To increase strength, coordination and ROM
- Increase postural stability
  - sitting and standing
- Increase control during transitional movements
- Improve both static and dynamic balance

Sequenced according to the four stages of motor control

- Mobility
- Stability
- Controlled mobility
- Skill

Four Stages of Motor Control

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Stability</th>
<th>Controlled Mobility</th>
<th>Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROM</td>
<td>Muscle Stability</td>
<td>Weight Shifting</td>
<td>Locomotion</td>
</tr>
<tr>
<td>AROM</td>
<td>Postural Stability</td>
<td>Transitional Movements</td>
<td>Manipulation</td>
</tr>
</tbody>
</table>

Large BOS $\rightarrow$ Smaller BOS

Low COG $\rightarrow$ Higher COG
Rolling
- Log rolling
- Segmental rolling

Hooklying and bridging

Prone
- Prone on elbows
- Prone on hands

Quadruped position

Sitting
- Short sitting
- Long sitting

Kneeling and Half-kneeling
Modified plantigrade/plantigrade

Standing

Mat/bed mobility for non-ambulatory patients
- Rolling without LE assistance
- Supine → prone
- Prone on elbows
- Supine → long sitting
- Long sitting with and without UE support
- Long sitting push-ups and scooting
- Short sitting (edge of mat or EOB)

Mat/bed mobility for non-ambulatory patients (cont.)
- Quadruped position
- Kneeling
- Assistive devices (loops, push-up blocks)
- SCI mobility handout

Moving forward and getting out of chair
- Try to stand up sitting far back in the chair
- Now scoot forward and try standing up
- Is there a difference?
- Try having both feet even
- Stand up with one foot in front and one in back
- Why is this difference important?