

Assessment front sheets for Unit 1: 'Applied Anatomy and Physiology and the Teaching of Asana':

Task description paragraph 1.2.2



1.1a Posture Profile

Name of Student Teacher:

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Name(s) of asana in Sanskrit

Uttanasana

Pronounced oo-taahn-aah-suh-nah

Literal translation/derivation

The Intense Pose: the word 'ut' means intensity and the word 'tan' to lengthen or strengthen in Sanskrit

Common English Name(s)

The Intense Pose or Standing Forward bend



Asana Analysis:

Key joints/articulation/nature of movement

Mild flexion of the vertebral column (vertebrae articulating with one another), whilst also focusing upon extension of the vertebral column

Flexion of the torso at the hips (the head of the femur articulating with the acetabulum of the hips)

Adduction and slight internal rotation of the legs at the hips (the head of the femur articulating with the acetabulum of the hips)

Flexion of the arms at the shoulders (humerus articulating with the glenoid cavity of the scapula)

Extension of the lower legs at the knees (femur articulates with the tibia)

Key factors involved in creating the movement from the starting point (prone, supine, semi-supine, sitting, kneeling, standing). Factors include muscular contraction, both concentric and eccentric as appropriate, and gravity.

To enter the pose: Gravity does most of the work - the upper body muscles must simply relax to enter the pose, with muscles at the back of the body (i.e. the hamstrings, erector spinae, gluteus muscles, external hip rotators and gastrocnemius) acting as brakes to slow the movement against gravity as needed i.e. eccentric contraction.

<p>Key muscle groups that need to be able to lengthen and relax in the posture (will be stretched?)</p>	<p>In particular our choice of arm placement when entering the pose will considerably change the strength required to enter the pose (and leave the pose) so that when arms are fully flexed forwards they increase the load on the back, whilst if we draw arms out to sides the load is lessened, and if hands are placed upon the hips/sacrum there is less still. The same is true for the legs where if they are fully extended (straight) the effort is further away from the pivotal point of the pose, the pelvis (hips) making the posture more challenging but if we bend knees then the effort is brought closer to the pelvis reducing the intensity of the pose.</p> <p>Spinal muscles (erector spinae)</p> <p>Buttock muscles (gluteus group)</p> <p>External hip rotators</p> <p>Posterior & medial thigh (hamstrings, adductor magnus)</p> <p>Posterior lower leg muscles (gastrocnemius & soleus)</p>
<p>Key factors that may cause limitations (joint shape, body proportion, tightness or weakness of key muscles e.g. tight hamstrings in uttanasana; weak quads in utkatasana)</p> <p>Key muscle groups that need strength either to move into, hold, or exit the posture</p>	<p>Limitations can be caused by:</p> <p>Tight hamstrings, back muscles and hips rotators.</p> <p>Some students may find there is a structural limitation for forward flexion and where this is experienced at the front of the body, e.g. at the front area of the hips then this will be a natural limitation, when it is experienced at the back of the body then overtime students will be able to flex more deeply as their muscles relax and lengthen. Also some students may find their legs are proportionately long relative to the torso and this may mean they will not be able to easily touch the floor or work by binding hands to feet.</p> <p>Some core strength is needed from the abdominals, pelvic floor and lower back muscles but this should not be forceful or it will compress the hip joints and vertebral column.</p> <p>The quadriceps, feet and ankle muscles also require some strength to enter the pose, to stabilise staying in the pose and exiting the pose.</p> <p>The back muscles require strength to enable us to enter</p>

	<p>and leave the pose safely.</p> <p>(When staying: the hip flexors (the iliopsoas, rectus femoris, adductors, sartorius and tensor fascia latae) will provide stability as will the trunk flexors (rectus abdominis and the iliopsoas) but we should avoid working them too strongly as this can close the hips sockets and compress the spine.)</p>
<p>Preparation Give examples of specific preparation. Indicate areas the preparation is targeting from the factors identified above.</p> <p>Ways of mobilising key joints</p> <p>Ways of preparing key muscle groups that will lengthen and relax</p> <p>Ways of preparing key muscle groups that need strength either to move into, hold or exit the posture</p>	<p>Mobilise hip joints: hip opening exercises such as supine hip circling, baddha konasana (cobblers pose) and chakki chalana (stirring the pot pose).</p> <p>Mobilise shoulder joints: shoulder circles & universal pose</p> <p>Hamstring stretches: such as supta padangusthasana (lying hand to big toe pose)</p> <p>Adductor stretches: such as upavistha konasana (wide angle pose) and anantasana (pose of bliss)</p> <p>Gluteus stretches: such as gomukhasana (cow's head pose) & Jathara Parivritti (revolving stomach pose)</p> <p>Back stretches: such as Majrasana (cat)</p> <p>Core strengtheners: such as navasana (boat)</p> <p>Back strengtheners: such as shalabasana (locust) & Bhujangasana (cobra pose)</p> <p>Quadriceps strengtheners: such as standing balances, utkatasana (squat)</p>
<p>Areas for Caution</p> <p>Herniated disc</p> <p>Low back conditions, Sciatica & General Discomfort</p> <p>Heart conditions, Hypertension & Mature diabetic. Eye and ear ailments</p> <p>Low blood pressure</p> <p>Hamstring injury or stiffness</p>	<p>Modifications to completed posture/Aids</p> <p>Avoid forward bends for at least 3 to 6 months</p> <p>Bend knees or can work to ardha uttanasana, half forwards bend), hand to chair if needed</p> <p>Do not keep the head down below the heart, can stay in ardha uttanasana, half forward bend.</p> <p>Take care moving between different heights, may need to take several breaths working downwards and upwards by staying at half forward bend</p> <p>Bend knees or can work to halfway only</p>

Hiatus Hernia	Work to half way only, can use a chair
Total hip replacement	Work to half way only, can use a chair
Hip re-surfacing	Work with caution
Osteoporosis	Work cautiously with knees bent as can over compress spinal vertebrae
Pregnancy	Work with caution, halfway with hands to chair can be an helpful modification – no prolonged stay
Sacro-iliac strain	Limit flexion, sitting on blocks, with bent knees
<p>Stages leading to the posture, if appropriate, (using less challenging/modified versions to prepare for/ lead into the final posture): including teaching points to promote good structural alignment and core strength/stability as appropriate to the posture</p> <p>1. Spend a little time exploring the anterior pelvic tilt, possibly in tadasana or in cat. Majrasana. In cat if an anterior tilt is not possible here, where the hamstrings are relaxed, then the student will need to explore whether there is a problem with the hip joints.</p> <p>2. Spend time in tadasana, mountain pose, experiencing pada bandha, the foot lock, also lifting arms up and down, checking that the core muscles are being gently employed and that the lower ribs are not flaring outwards so the spinal muscles and pelvis stay in a neutral state.</p> <p>3. Start with hands to hips with knees bent and experience flexing forwards from the hips; at first to hip height only then to full flexion forwards if relevant. Students need to ensure they are aware of the positioning of the hips and that the flexion forwards occurs at this point.</p> <p>4. Try working in the same way with blocks between thighs to encourage a slight adduction whilst relaxing external hip rotators and the gluteus muscles of the buttocks</p> <p>5. Interweave fingers behind the back and fold forwards with bent knees bringing arms overhead, then to lift up lower arms, lifting the torso; by using the arms as a lever the effort is spread more widely making the pose more accessible for some students.</p> <p>6. Lifting arms forwards (flexion through elevation) then folding forwards lower arms out to sides, sometimes known as the 'swallow dive', with bent knees or straight legs as appropriate.</p> <p>7. Lifting arms forwards (flexion through elevation) then folding forwards lower arms forwards with arms held forwards, with bent knees or straight legs as appropriate.</p>	
<p>Teaching points while in the posture</p> <ul style="list-style-type: none"> ○ Centre in tadasana with feet hip width apart, feet aligned forwards. Find pada 	



bandha, the foot lock, by balancing the weight of the body equally through all four corners of the feet; press more firmly through the inner edges of the balls of the feet to lift arches and ankles; spread the toes open without gripping them. Let there be a gentle firming of the thigh muscles, ensuring the pelvis stays in a neutral position. Adopt a gentle mula bandha becoming aware of rooting downwards as you lift upwards through the crown. Link in with your breathing.

- There are several ways to enter the forward bend, here we will inhale raising arms forwards and up to the full vertical position (flexion through elevation), keeping shoulders relaxed, the lower ribs as if moving inwards away from the skin so they do not flare outwards and misalign the spine and the pelvis.
- Then exhaling hinge forwards from the hips, keeping length within the whole spinal column as you lower arms downwards through an arc i.e. “swallow dive”. Allow gravity to draw you gently forwards.
- Remember to keep looking downwards to keep length in the cervical spine and draw your tailbone and sitting bones backwards and upwards to work from the hips with an anterior tilt of the pelvis. If there is any discomfort in the lower back or hamstrings then bend knees as you lower down into the forward bend.
- Place hands to the floor besides the feet if possible, if hands do not reach the floor then again bend knees or place hands to blocks; do not use the arms to draw you deeper in the bend.
- Engage the thigh muscles and draw the legs as if together.
- Allow the abdomen to rest along the thighs and imagining the chest is very heavy with every inhalation just allow the body to lift a little away from the thighs encouraging the spine to lengthen, as you draw shoulder blades backwards and with every exhalation let the ‘heavy’ chest draw you deeper into your forward bend.
- Let the head be heavy, neck long and relaxed.
- Imagine your tailbone and sitting bones ascending as the crown of your head descends, aligning hips above ankles as you maintain the foot lock where weight is spread evenly throughout the feet. To relax the buttock muscles gently draw your thighs as if together, although the legs remain still.
- You could picture the spine to be like a waterfall cascading downwards from the top of the pelvis, alternatively breathing in with your awareness flowing up the back of the legs and exhaling down along the spine or simply use the breath to subtly move the body.

Bringing students out of the posture

To exit: establish a stronger connection with your feet and legs, firm the muscles of the abdomen then inhaling lift arms out to sides to shoulder height, opening the chest and lifting the upper body to hip height then continuing upwards raising arms up through a circle to the vertical position and exhaling lower arms back down to sides through an arc

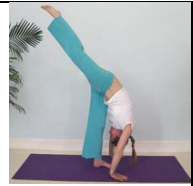
Variations/ways of developing the posture

One good variation is to lift and lower only one arm. This however needs to be taught only after students can work symmetrically. It can be very good for scoliosis where students work twice to the weaker side.



We can also alter the way of staying in the asana by placing hands in various positions. For instance we can hold our wrist around the outside of legs, place palms under soles, or hold big toes.

There are many way of developing the pose for those who require more intensity such as lowering down with hands in reverse namaste or by lifting into eka pada uttanasana (one foot forward bend)



We can also lift and lower out of the pose in a different way such as entering the pose from a squat position.



It is also possible to wrap arms around legs with knees bent, spine long then keeping the connection with the thighs slowly straighten legs.

Working with a rag doll standing forwards bend can be good, where the hands slide down the legs, knees bending if necessary, as the whole body relaxes completely; this can help to surrender to the pose



Counterposes

Can use:

- Arms to ceiling in tadasana, i.e. urdhva hastasana, raised arm pose
- Adopt a gentle squat, utkasana where the back remains extended
- Move into malasana, the garland pose, where the knees are bent but the spine is lengthened
- Balasana, apanasana or supta baddha konasana

Key benefits and effects: (If esoteric, refer to source ancient texts)

- Quiets the mind
- Calms the systems of the body, especially the cardiovascular and nervous systems
- Floods the brain with blood providing a sense of calm and clarity
- Rejuvenates the spinal nerves
- Tonifies internal viscera, especially the liver, spleen and kidneys
- Stimulates the digestive system, eliminating gas, constipation & indigestion
- Lengthens hamstrings, tones backs of legs
- Gives suppleness to the spine
- Alleviates menstrual pain

References in source ancient texts (if any)**Sources of information from modern teachers/bibliography**

Anatomy and Asana, Susi Hately Aldous, Eastland Press, 2004, p65 to 72

Anatomy of Hatha Yoga, H. David Coulter, Body & Breath Inc., 2001, p240 to 247

Asana, Pranayama, Mudra, Bandha, Swami Satyananda Saraswati, Bihar School, 1969, p199 to 200

Instructing Hatha Yoga, Kathy Lee Kappemeir & Diane M. Ambrosini, Human Kinetics, 2006, p88 to 90

The Yoga Bible, Christine Brown, Godsfield Press, 2003 p310 to 311

Yoga: The Spirit and Practice of Moving into Stillness, Erich Schiffman, Pocket Books, 1996, p107 to 117

Yoga Anatomy, Lesley Kaminoff, Human Kinetics, 2007, p42 to p43

Yoga Body, Judith Hanson Lasater, Rodmell Press, 2009, p25, p26, p106

Student teacher's comments on what has been learned from this task**Student teacher's signature****Date****Tutor's comments:****Tutor's signature****Date**

Notes for guidance: This template should be expanded in size to include detail as required. Diagrams may be used for explanation. All areas of the profile must be covered as relevant to the specific posture. Some aspects will be more applicable than others, depending on the posture. Tutors may ask for other information to be included.