TOTAL SCORE: ___________________________  
80% = 200 (female SP)  
192 (male SP)  

Student: ___________________________  
Evaluator: ___________________________  

Date: ___________________________

PHYSICAL DIAGNOSIS 11  
CHECKLIST FOR COMPLETE PHYSICAL EXAMINATION – Revised Aug 2012

BEFORE EXAM

1. Wash hands before starting examination.

A. GENERAL INSPECTION/VITAL SIGNS - Patient Supine

2. Measure blood pressure in one arm

3. Place cuff snugly in correct anatomical location  
   **Teaching Point:** Checks for postural changes in BP and pulse (check for changes within 1-2 minutes of changing position) - supine \(\rightarrow\) sitting \(\rightarrow\) standing

4. Measure respiratory rate for at least 30 seconds - Patient sitting

5. Palpate radial (thumb side of wrist)

6. Palpate for at least 15 seconds

7. Palpate radial (wrist) pulses simultaneously for symmetry

Total Possible Score (vitals) Section A: 7  
Score Achieved____

B. HEAD AND NECK

8. Inspect head and face for any abnormalities

9. Palpate scalp

10. Palpate thoroughly  
    **Teaching Point:** Palpate parotid glands and temporal arteries.

EYES

11. Position patient at height comfortable for examiner

12. Estimate visual acuity (near or far) (uses pocket chart or distance at which patient can read newspaper)

13. Checks each eye separately

14. Test visual fields by confrontation  
    **Teaching Point:** Evaluate for extinction by double simultaneous stimulation

15. Inspect external ocular structures (lids, cornea, conjunctiva)

16. Gently move eyelids up and down to obtain better view

17. Evaluate extraocular muscle function in 6 directions

18. Check for convergence

19. Observe pupillary response to light (direct)

20. Observe pupillary response to light (consensual)

Prepares for ophthalmoscopic exam

21. Dim lights before ophthalmoscopic examination

22. Hold ophthalmoscope properly and use index finger to switch lenses

Performs ophthalmoscopic exam

**Right Eye**

23. Hold ophthalmoscope with right hand when inspecting patient's right eye

24. Inspect anterior structures with ophthalmoscope

25. Hold ophthalmoscope at proper distance to visualize posterior structures in eye (i.e., appropriately close to patient’s eye)

26. Inspect optic nerve

27. Trace vessels in four quadrants

28. Observe macula (ask patient to look at light)

**Left Eye**

29. Hold ophthalmoscope with left hand when inspecting patient's left eye

30. Inspect anterior structures with ophthalmoscope

31. Inspect optic nerve

32. Trace vessels in four quadrants
Observe macula (ask patient to look at light)

**EARS**
34. Observe auricles and postauricular regions bilaterally
35. Palpate auricles bilaterally
36. Test auditory acuity (use rubbing fingers, ticking watch, low voice; check these while standing behind the patient and having opposite ear occluded)
37. **Teaching Point** Perform Rinne and Weber tests if any evidence of decreased acuity (use 512Hz or 256Hz tuning fork)
38. Examine ears bilaterally with otoscope
39. Pull auricle superiorly, posteriorly, and away from the patient
40. Insert speculum without causing pain to the patient

**NOSE**
41. Palpate for frontal sinus tenderness
42. Palpate for maxillary sinus tenderness

**Teaching Point** Transilluminate frontal, maxillary sinus (darken room; shine otoscope/nasal transilluminator superiorly from superior orbital rim bilaterally and compare relative light transmission through frontal sinuses; from inferior orbital rim direct light inferomedially and while having patient open mouth, see if light shines through to hard palate for maxillary sinuses.)
43. Inspect nasal vaults with nasal speculum on otoscope
44. Insert speculum without causing pain to patient
45. Test for patency (openness) of both nasal passages (have patient compress one nasal orifice and ask patient to sniff through opposite opening)

**MOUTH**
This following allows the student to appreciate cancers of the lip, mucosa and tongue; cavities, periodontitis and other benign lesions in all areas of the mouth, including torus planus or lichen planus.
46. Examine patient without causing discomfort
47. Inspect lips, gums, buccal mucosa, palate and floor of mouth
48. Inspect all surfaces of all teeth
49. Inspect posterior pharynx, uvula and tonsils
50. Inspect base and lateral elements of tongue using gloves and gauze
51. Palpate floor of mouth with bimanual exam
52. Palpate temporomandibular joint as patient opens and closes jaw

**NECK**
53. Inspect neck for symmetry
54. Palpate jugular notch to make sure trachea is midline (jugular notch midway between clavicular heads)
55. Palpate carotid arteries, each side separately.
56. Auscultate carotid arteries for bruits
57. Palpate thyroid in correct anatomical location
58. Examine thyroid from posterior position with 2 hands or from anterior position with 1 hand (patient's chin slightly flexed; sternocleidomastoid muscles should not be taut.)
59. Palpate with and without swallowing

**Palpate lymph nodes:**
60. Preauricular nodes
61. Posterior auricular nodes
62. Occipital nodes
63. Tonsillar nodes
64. Submandibular nodes
65. Submental nodes
66. Anterior cervical nodes
67. Posterior cervical nodes
68. Supraclavicular nodes

**Total Possible Score (Head and neck) Section B:** 61  
**Score Achieved:**
C. LUNGS

POSTERIOR/LATERAL

Teaching Point - Check thoracic expansion

_____ 69. Ask patient to cross arms, to move scapulae and expose lung fields

_____ 70. Percuss posterior lung fields
_____ 71. Percuss fields bilaterally and symmetrically
_____ 72. Percuss at least 6 areas
_____ 73. Percuss lateral lung fields
_____ 74. Percuss bilaterally

Teaching Point - Measure excursion of the diaphragm bilaterally- (distance diaphragm moves between inspiration and expiration)

_____ 75. Instruct patient to breathe through open mouth
_____ 76. Auscultate posterior lung fields*
_____ 77. Auscultate bilaterally and symmetrically
_____ 78. Auscultate lateral lung fields*
_____ 79. Auscultate bilaterally

ANTERIOR

Prepare for anterior lung exam

_____ 80. Drape patient appropriately:
   Draping
   If sitting: Have patient untie johnnie and expose anterior chest keeping the breasts draped.
   If supine: Untie johnnie. Drape sheet over abdomen and legs, and raise johnnie up from below waist, keeping the breasts draped.

_____ 81. Percuss anterior lung fields
_____ 82. Percuss fields bilaterally and symmetrically
_____ 83. Auscultate anterior lung fields*
_____ 84. Auscultate fields bilaterally and symmetrically
_____ 85. Auscultate in at least 6 places

* If rales present, check for bronchophony, egophony, whispered pectoriloquy,
Teaching Point: Check tactile fremitus bilaterally and symmetrically

Total Possible Score (Lungs) Section C: 17    Score Achieved ___

D. BREASTS (Female)

Axillary Node Palpation
With patient remaining in upright sitting position, examiner should:

_____ 86. Palpate axillary nodes
_____ 87. Use proper technique to palpate axillary nodes
   (Palpate all 4 folds - anterior, superior, medial and lateral)

Breast Visualization

_____ 88. Use appropriate draping (Drape sheet over patient’s lap; remove arms from johnnie and expose anterior chest / breasts. Inspect musculature, skin surface and movement of both breasts as you direct the patient in the following maneuvers)
_____ 89. Patient sitting, arms at sides
_____ 90. Patient sitting, arms pressed to hips
_____ 91. Patient sitting, arms raised outstretched above head
_____ 92. Patient sitting, hands clasped behind head, “rocks” elbows forward and back
_____ 93. Patient sitting, leans forward with examiner taking patient’s hands for support
Breast Palpation: (use any of these techniques: Vertical strip, radial spoke, circular)

With patient in supine position, examiner should have pillow placed under patient’s head for support, then:

94. Use a draping technique to expose only the breast being examined while keeping other breast covered
95. Ask patient to place ipsilateral hand behind head
96. Palpate breast using one of the 3 techniques listed above
97. Exert 3 levels of pressure using rotary motion of 2nd / 3rd / 4th fingertip pads
98. Palpate all tissue within breast boundaries (sternum, 5th rib, lateral lung field / axillary midline, clavicle)
99. When examiner reaches midline/areola, ask patient to assume oblique position (twist upper torso away from examiner); Proceed with palpation. Patient should now be asked to change arm position from behind head to forehead.
100. Palpate both breasts

Total Possible Score (Female breast exam): 15  Score Achieved

BREASTS (Male)

101. Palpate axillary nodes (can also be done during breast exam)
102. Use proper technique to palpate axillary nodes (Palpate all 4 folds - anterior, superior, medial and lateral)

103. Use patient pull up johnnie to expose precordium and breasts.
104. Use appropriate draping. (Drape sheet over pt’s lap; remove arms from johnnie and expose anterior chest / breasts.)
105. Palpate all 4 quadrants of each breast
106. Palpate nipples bilaterally
107. Palpate areolae

Total Possible Score (Male breast palpation): 6  Score Achieved

E. HEART

INSPECTION

107. Adjust johnnie to expose precordium
108. Observe precordium for visible movements
109. Elevate trunk 30 degrees and head and neck so jugular venous pulses are visible
110. Observe neck veins and estimate jugular venous pressure

PALPATION

Palpate carotid arteries (can be done with neck exam and is scored in neck exam; alternatively, can be done now to time heart sounds)

111. Palpate costochondral junctions
112. Compress rib cage anteroposteriorly
113. Palpate aortic area (2nd ICS-right)
114. Palpate pulmonic area (2nd and 3rd ICS-left)
115. Palpate right ventricular area
116. Apical area (5th ICS-left) (Palpate for point of maximal impulse (PMI). If not palpable, have patient roll into left lateral decubitus position and re-check.

AUSCULTATION

Use diaphragm of stethoscope to:

Auscultate carotid arteries (can also be done with neck exam and is scored in neck exam)

117. Auscultate aortic area
118. Auscultate pulmonic area
119. Auscultate tricuspid area (4th and 5th ICS at left sternal edge)
120. Auscultate apical area

Use bell of stethoscope to:

121. Auscultate apical area
122. Auscultate aortic area
123. Auscultate pulmonic area
124. Auscultate tricuspid area.
125. Light pressure only applied to bell  
(Note: Listen with bell applied lightly to chest; too much pressure applied causes bell to function as a diaphragm)

**Teaching Points**
Have large-breasted female patients lift the left breast to expose apex for palpation and auscultation.
For patient with murmur that requires further characterization, check effect of Valsalva, hand grip, squatting and/or standing.
For patient with murmur, use 'inching' technique to track murmurs (along aortic outflow tract to upper chest and carotids for aortic systolic murmurs; toward apex for diastolic murmurs).
For patient with suspected aortic regurgitation, have patient sit up, lean forward and auscultate 2nd and 3rd left intercostal space with stethoscope diaphragm.
For patient with suspected mitral valve disease:
  Ask patient to roll to left lateral position.
  Have female patient again lift breast.
  Relocate apex and place bell directly over it, very lightly.
  Auscultate apex with bell, listening specifically for S₃, S₄, diastolic rumble.

<table>
<thead>
<tr>
<th>Total Possible Score (Heart) Section E: 19</th>
<th>Score Achieved</th>
</tr>
</thead>
</table>

**F. ABDOMEN**
Prepare for the abdominal exam: Examine patient from right side

126. Use proper draping technique to expose entire abdomen, but leave chest and pubis covered
127. Teach patient to relax abdominal musculature
128. Watch patient's face as you examine abdomen

**INSPECTION**
129. Inspect abdomen for distention, scars, hernias, visible pulsations, venous pattern, bulging flanks

**AUSCULTATION (before manipulation or palpation)**
130. Bowel sounds
131. Left upper quadrant to include (L) renal artery
132. Right upper quadrant to include (R) renal artery
133. Right lower quadrant to include (R) iliac artery
134. Left lower quadrant to include (L) iliac artery
135. Aorta

**PERCUSSION**
136. Percuss (or use scratch test) to determine liver span

**PALPATION**
137. Left upper quadrant
138. Palpate spleen with inspiration and expiration  
  **Teaching Point** If splenomegaly suspected, roll patient to right lateral decubitus and palpate for spleen.
139. Epigastrium to include aorta
140. Delineate margins of aorta
141. Right upper quadrant
142. Use proper technique to palpate liver edge (palpate below right costal margin for liver as patient breathes; liver should descend with inspiration and can be palpated with examining hand. Alternatively, hook hands around ribs from above patient as patient inspires.)
143. Palpate liver edge with inspiration and expiration  
  **Teaching Point** If suspected ventral hernia, palpate abdomen standing, or as patient sits up.
144. Palpate right lower quadrant
145. Palpate left lower quadrant

**After Abdominal Exam is complete:**
146. Palpate inguinal lymph nodes
Auscultate for femoral bruit
Palpate femoral pulse bilaterally
Palpate one femoral pulse and radial or carotid pulse simultaneously

Total Possible Score (Abdomen) Section F: 24
Scored Achieved

G. ARTHROSKELETAL EXAM

NECK
Inspect / palpate neck (if not done previously; maneuvers scored in head and neck exam)

150. Test neck flexion
151. Test neck extension
152. Test neck rotation left and right
153. Test lateral flexion of neck right and left

UPPER LIMBS

154. Inspect bilaterally with outer clothes removed.

HANDS

155. Inspect dorsal and palmar surfaces of hands (Note that this also tests pronation/supination of elbows)

ROM of Hand:

156. Make fist
157. Extend fingers into claw position
158. Full extension of fingers
159. Thumb opposition

WRISTS

160. Flex, Extend
161. Abduct, Adduct
162. Tested with elbows locked

163. Palpate interphalangeal joints individually, right and left
164. Squeeze MCP joints together, right and left, if this causes pain, palpate each MCP individually
165. Palpate wrists bilaterally
166. Test for Tinel’s sign, right and left (tap on lateral wrist, volar surface over median nerve)
167. Have patient hold wrists in proper position to elicit Phalen’s sign (flexion of wrists with dorsum of hands pressed together)

ELBOWS

168. Flex, Extend
169. Pronate, Supinate
170. Test with elbows locked

171. Palpate elbow, including medial and lateral epicondyles, olecranon and ulna just distal to olecranon
172. Palpate epitrochlear nodes

SHOULDERS

173. Flex, Extend
174. While fully abducted, test internal, external rotation
175. Adduction [Note that adduction is also done during auscultation of lungs (checklist #68).]
   Have patient slip left arm out of johnnie / retie johnnie, exposing left shoulder and inspect
176. Palpate left sternoclavicular joint
177. Palpate left acromioclavicular joint
178. Palpate left supraspinatus tendon (subacromial bursa); palpate over posterior/lateral shoulder for tenderness.
179. Palpate left tendon of long head of biceps (bicipital groove)
   Have patient replace left arm in johnnie; remove right arm and retie to expose right shoulder and inspect.
180. Palpate right sternoclavicular joint
181. Palpate right acromioclavicular tendon
182. Palpate right supraspinatus tendon
183. Palpate right tendon of long head of biceps (bicipital groove)
   Replace right arm in johnnie / retie
**Lower Limbs**

184. Use proper draping to expose both legs (drape between legs, covering genital region.)
185. Inspect bilaterally with outer clothes removed.
186. Inspect feet, including toes.

**HIPS**

Observe supine posture; (note that this also tests hip and knee extension.)
187. Flex, right and left; (note that this also tests flexion of knee.)
188. Internal rotation, External rotation, right and left
189. Abduction, Adduction right and left
190. Palpate greater trochanters, right and left

**Teaching Point**

Patrick Test (FABERE; Flexion, Abduction, External Rotation, and Extension), right and left - a smooth comprehensive maneuver that integrates maneuvers, 2,4,5; can add internal rotation and adduction)

**KNEES**

191. Inspect, right and left
192. Flex, extend, right and left
193. Palpate joint margin, popliteal space and anserine bursa
194. Check for effusion (floating patella and bulge sign)
195. Test valgus and varus stability with knee slightly flexed (check for medial / lateral stability)
196. Test anterior and posterior drawer sign (An alternative for anterior drawer sign, Lachman's test has you flex knee to 20 degrees, stabilize knee above patella, and attempt to move lower leg anteriorly)
197. Perform McMurray's Test (extend knee from fully flexed position while internally rotating leg at ankle, repeat while externally rotating leg at ankle; look and feel for 'click' at knee with hand on knee)

**ANKLE AND FOOT**

198. Inspect ankle and foot
199. Dorsiflex and plantar flex ankle and toes, right and left
200. Evert and invert ankle
201. Evert and invert forefoot, holding the heel steady
202. Palpate ankle including Achilles tendon and its bursa
203. Squeeze MTP joint together, right and left; (if this causes pain, palpate each joint individually)
204. Palpate interphalangeal joints individually

**Teaching Point**

If active range of motion is abnormal, or if pain / tenderness is elicited, then perform passive range of motion, careful inspecting for swelling / redness; and, palpation for increased warmth should be performed on that joint.

**Palpate pulses bilaterally:**

205. Popliteal
206. Posterior tibial
207. Dorsalis pedis
208. Check for peripheral pitting edema (over soft tissue of leg)
209. Use proper technique to check for pitting edema

**BACK - Patient Standing**

Use proper draping to expose both legs (drape between legs and cover genital region.)

210. Inspect for kyphosis, scoliosis
211. Perform fist percussion of, or palpate, cervical, thoracic, lumbar, sacral vertebrae
212. Perform fist percussion of costovertebral angle
213. Check for sacral edema
214. Palpate SI joints
215. Palpate sciatic notch (Palpate at midpoint of gluteal fold superiorly and anteriorly for pain.)

**Test ROM of L-S spine**

216. extension
217. lateral bending
Flexion  
Straight leg raising – Raise leg fully extended at knee, flexing hip; ask pt. to describe location and nature of discomfort

Total Possible Score (Arthroskeletal) Section G: 71  Score Achieved

H. NEUROLOGICAL-MUSCULOSKELETAL SCREENING EXAMINATION

MENTAL STATUS
- Observe mood, affect, behavior
- Orientation (to person, time of day, day of week, month, place of examination, i.e. “Do you know where we are right now?”. Language (name common objects; repeat “no ifs, ands or buts”).
- Concentration: serial sevens from 100 or serial 3’s from 20, depending on ability
- Short term memory: store and recall 3 unrelated items after several minutes
- Remote memory: dates of distant past events

Speech (Usually assessed during history) - Check naming, repetition; observe spontaneous speech

CRANIAL NERVES
- Test Nerve 1: Sense of smell – Ask pt. if there has been any change in smell or taste.

Test Nerve II: (May be done with EENT)
  a. Visual acuity
  b. Visual fields
     Ophthalmoscopic (disc, blood vessels, retina)

Test Nerves III, IV, VI: (May be done with EENT)
  a. Pupillary reaction to light and accommodation
  b. Extraocular movements

Test Nerve V:
  Sensory function:
- Briefly test all 3 divisions for light touch and pinprick (Test corneal reflexes bilaterally when appropriate.)

  Motor function - Test Contraction of masseter (jaw) muscles or forced opening of mouth against resistance (mylohyoid and digastrics)

Test Nerve VII: (may be done with EENT)
Motor function in mimetic musculature of the face:
- Raise eyebrows or forced eyelid closing
- Show teeth, puff out cheeks, or smile

Test Nerve VIII:
  Hearing (may be done with EENT examination)

Test Nerves IX and X:
  Observe elevation of palate vocalizing "ah" (may be done with EENT)
  Test gag reflex when appropriate.

Test Nerve XI: (may be done with Head and Neck Exam)
- Test rotation of patient’s head against resistance
- Test shoulder shrug against resistance

Test Nerve XII:
- Observe midline protrusion of the tongue. (may be done with examination of the mouth)

MOTOR STATUS
Examine functional groups of muscles for strength.

UPPER LIMB STRENGTH
- Proximal Muscles (close to trunk – upper arms) Test for Pronator Drift (arms extended, supinated, fingers spread, eyes closed) OR testing upper arm strength against resistance.
Distal Muscles: Test patient's grip OR have patient form ring with thumb and index finger which examiner tries to pry apart with both hands OR have patient spread fingers against resistance.

LOWER LIMB STRENGTH

PROXIMAL muscles – Test standing unless pt. unable

Flex hip against resistance, pt. seated or supine
Flex and extend knee against resistance, pt. seated or supine

DISTAL

Dorsiflex and plantarflex foot against resistance, pt. seated or supine
Ask patient to push down on gas against resistance AND lift up feet against resistance AND test is done on both feet.
Ask patient to lift leg off table against resistance.

REFLEXES

Deep tendon reflexes (test bilaterally, using appropriate technique):

Test biceps reflex (patient seated, hands relaxed in lap).
Test brachioradialis reflex. (patient seated, hands relaxed in lap, or examiner supporting forearm).
Test triceps reflex (patient seated, hands relaxed in lap, or examiner supporting arm abducted at shoulder).
Test quadriceps (patellar) reflex (patient seated with legs swinging freely OR if supine, with knee resting on examiner's wrist).
Test Achilles reflex (patient seated, examiner may passively dorsiflex foot, OR if supine, rest ankle to be tested on other leg)

Cutaneous reflexes:

Test plantar reflex

CEREBELLAR FUNCTION

Rapid alternating movements bilaterally – hands on thighs
Finger-to-nose bilaterally (patient must fully abduct arm to horizontal and extend elbow)
Heel-Knee-Shin bilaterally (patient seated upright and not supine.
Touch heel to opposite knee, slide down tibia to ankle then back to knee.
Heel should be on front of shin and not hook heel over the tibia.

SENSORY STATUS

Demonstrate difference between sharp and dull stimuli
Test light touch and pin prick on both sides of trunk
Test light touch and pin prick on 4 limbs, on at least one proximal and one distal site.
Proprioception: demonstrate difference between moving toe up and down, hold toes along side edges
Test position sense in great toes bilaterally
Test vibratory sense in both ankles using 128 Hz tuning fork (be sure pt. perceives vibration, not pressure)

GAIT AND STATION

Examiner must assure patient safety throughout.
Assess standing posture and gait. Watch for symmetrical arm swing, stability on turns.

Have patient walk on toes (also tests proximal strength)
Have patient walk on heels (also tests proximal muscle strength)
Observe tandem gait, heel to toe.
Romberg test (patient standing, feet together, eyes open; close eyes and hold.)
Total Possible Score Section H:  36   Score Achieved ___

Revised, April, 2000
John Solomonides, M.D.
Eric Alper, M.D.
Dave Hatem, M.D.
Mary O’Brien, M.D.
Wendy Gammon, M.Ed., M.A.

Revised June, 2011:
Hugh Silk, MD

Revised January 2012
Phillip Fournier, MD

© University of Massachusetts Medical School
STUDENT 'S NAME: ______________________________________

DATE: __________________________________________________

<table>
<thead>
<tr>
<th>Score</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>250</td>
<td>241</td>
</tr>
<tr>
<td>90%</td>
<td>225</td>
<td>216</td>
</tr>
<tr>
<td>80%</td>
<td>200</td>
<td>192</td>
</tr>
</tbody>
</table>

Exam Section Subtotals:
Section A (Vitals) _________
Section B (Head and Neck) _________
Section C (Lungs) _________
Section D (Breasts Female) _________
Section D (Breasts Male) _________
Section E (Heart) _________
Section F (Abdomen) _________
Section G (Arthroskeletal) _________
Section H (Neurological) _________

TOTAL SCORE _________________
INSTRUCTIONS TO EVALUATOR

For Question 1, Parts a and b, please circle yes or no for each item.

1. (a) Did the examiner introduce himself/herself?       Yes   No
    (b) Did the examiner demonstrate ability to develop rapport? Yes   No

For Questions 2 through 9, please circle the score which best describes the examiner's performance.

5 = always  
4 = about half the time 
3 = very rarely 

2. Did the examiner show concern for the patient's comfort and assure privacy during the examination? 
   5   4   3   2   1

3. Did the examiner present himself/herself in a professional manner (verbal & non-verbal behavior)? 
   5   4   3   2   1

4. Did the examiner explain procedures and prepare the patient for the use of instruments? 
   5   4   3   2   1

5. Did the examiner perform the complete PE in a logical sequence without repetition, progressing from one region to another? 
   5   4   3   2   1

6. Did the examiner examine and compare symmetrical parts of the body? 
   5   4   3   2   1

7. Did the examiner examine the patient with serial exposure appropriate to the steps of the examination? 
   5   4   3   2   1

8. Did the examiner examine the patient gently when there was patient contact? 
   5   4   3   2   1

9. Did the examiner demonstrate good percussion technique? 
   5   4   3   2   1

Additional comments: