

# **ANAT1005**

## **Muscular Component of the Skeletal Module**

**The content within this document is based off the following lectures and their relevant practical notes:**

**LECTURE 11 – Skeletal Muscle**

**LECTURE 12 – Muscles of the Head & Neck**

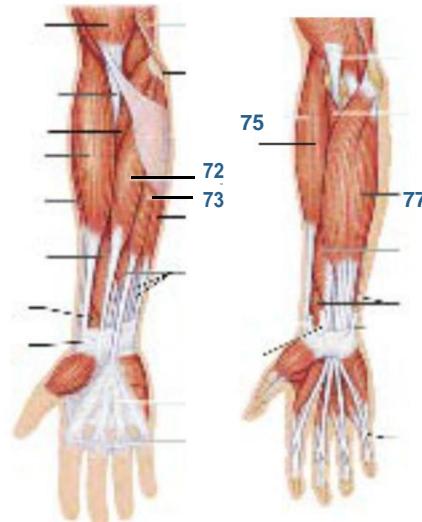
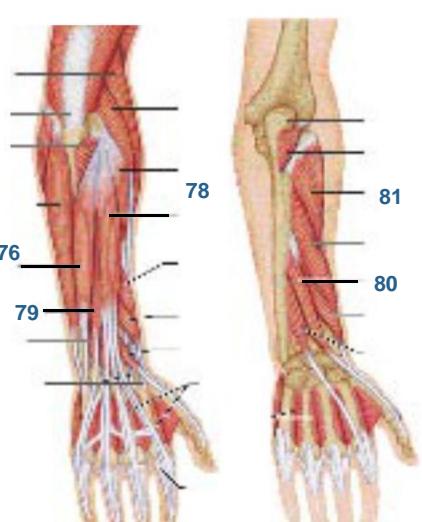
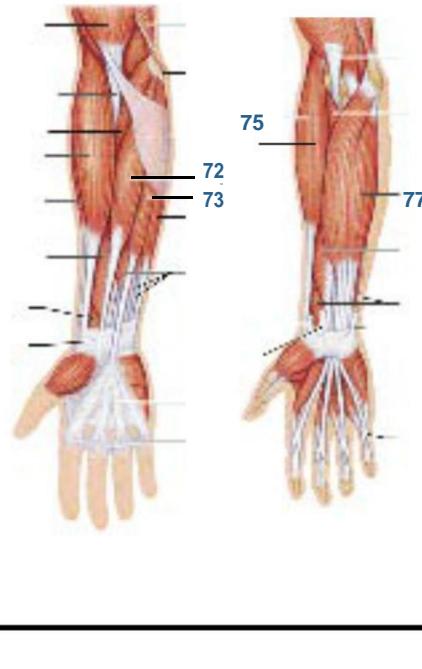
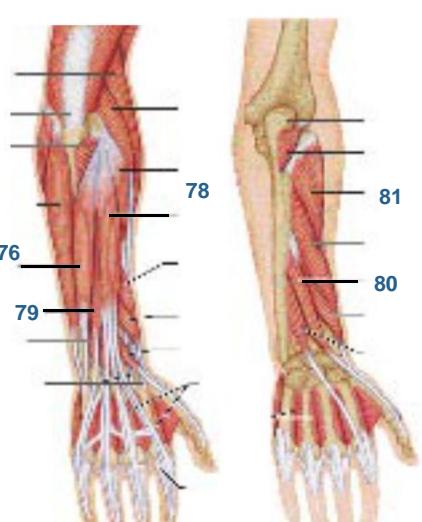
**LECTURE 13 – Muscles of the Back & Trunk**

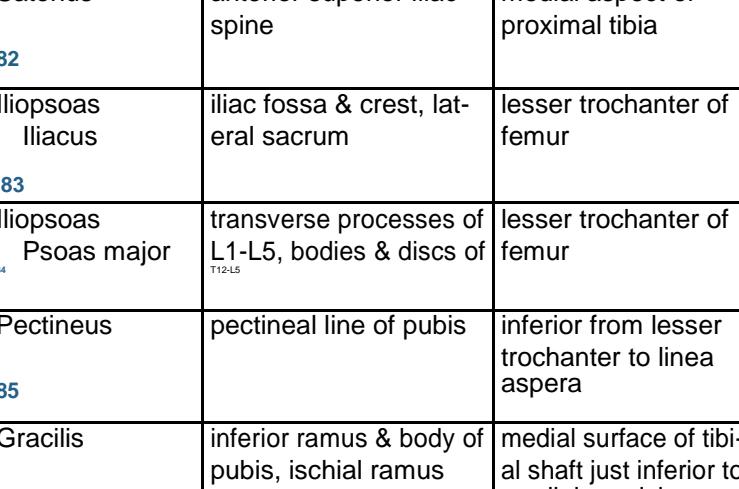
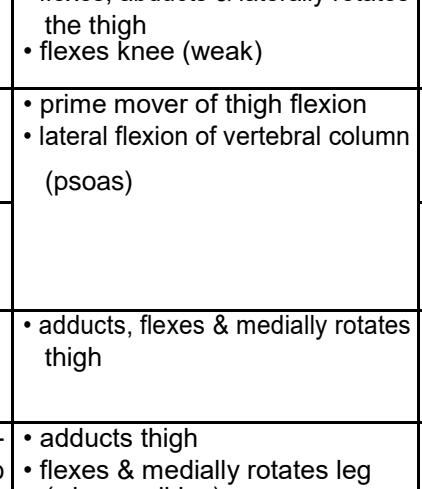
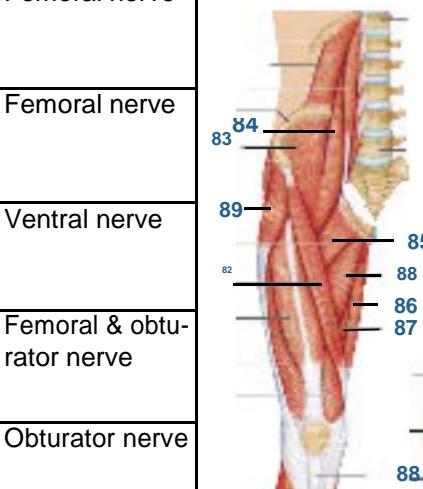
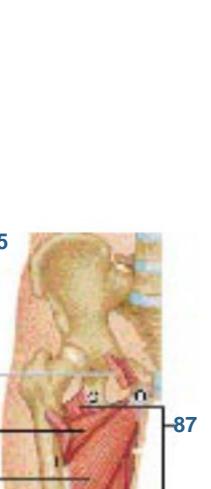
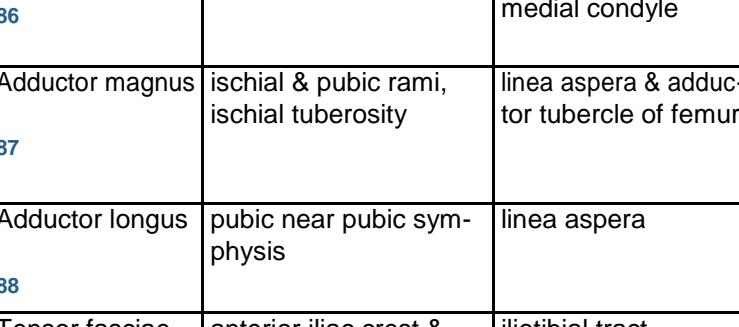
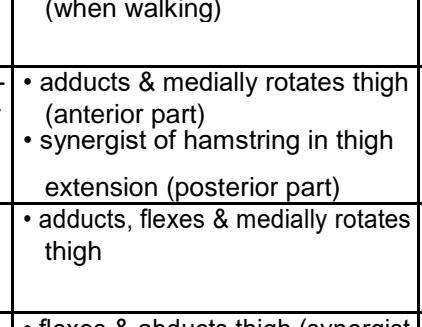
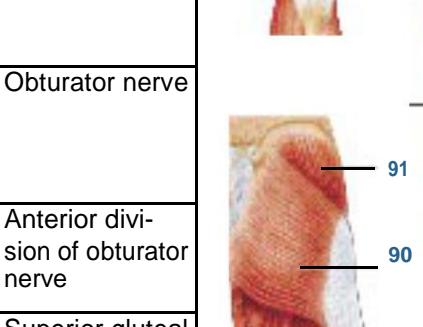
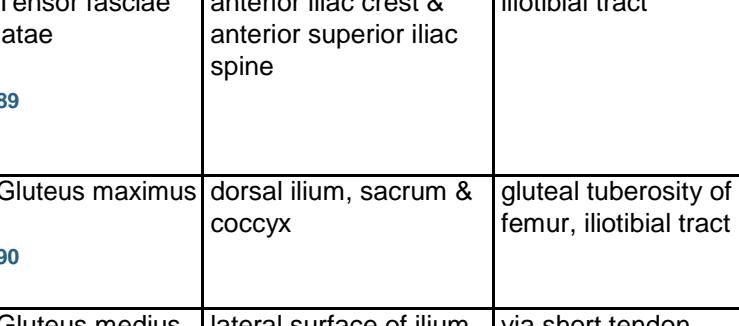
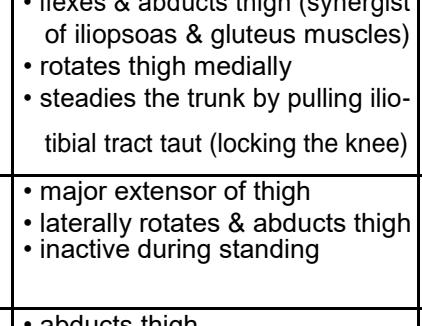
**LECTURE 14 – Muscles of the Pectoral Girdle & Arm**

**LECTURE 15 – Muscles of the Forearm & Hand**

**LECTURE 16 – Muscles of the Hip & Thigh**

**LECTURE 17 – Muscles of the Leg & Foot**

	Name	Origin	Insertion	Action	Nerve	
Wrist Flexors	Flexor carpi radialis 72	medial epicondyle of humerus	base of 2nd & 3rd metacarpals (anterior)	<ul style="list-style-type: none"> <li>powerful flexor of wrist</li> <li>abducts the hand</li> <li>weak synergist of elbow flexion</li> </ul>	Median nerve	
	Palmaris longus 73	medial epicondyle of humerus	palmar aponeurosis, skin & fascia of palm	<ul style="list-style-type: none"> <li>weak wrist flexor</li> <li>weak synergist of elbow flexion</li> <li>tenses skin of palm during hand movements</li> </ul>	Median nerve	
	Ulnaris 74	humerus, olecranon process & posterior surface of ulna	bones & base of 5th metacarpal (anterior)	<ul style="list-style-type: none"> <li>adducts hand with extensor carpi ulnaris</li> <li>stabilized wrist during finger extension</li> </ul>		
Wrist Extensors	Extensor carpi radialis longus 75	lateral supracondylar ridge of humerus	base of 2nd metacarpal (posterior)	<ul style="list-style-type: none"> <li>extends wrist with extensor carpi ulnaris</li> <li>abducts wrist with flexor carpi radialis</li> </ul>	Radial nerve	
	Extensor carpis ulnaris 76	lateral epicondyle of humerus & posterior border of ulna	base of 5th metacarpal (posterior)	<ul style="list-style-type: none"> <li>extends &amp; adducts wrist</li> </ul>	Deep branch of radial nerve	
Finger Movers	Flexor digitorum superficialis 77	medial epicondyle of humerus, coronoid process of ulna, shaft of radius	by four tendons into middle phalanges of fingers 2-5	<ul style="list-style-type: none"> <li>flexes wrist &amp; middle phalanges of fingers 2-5</li> </ul>	Median nerve	
	Extensor digitorum 78	lateral epicondyle of humerus	by four tendons into extensor expansions & distal phalanges of fingers 2-5	<ul style="list-style-type: none"> <li>prime mover of finger extension</li> <li>extends wrist</li> <li>can abduct (flare) fingers</li> </ul>	Posterior interosseous nerve, a branch of radial nerve	
	Extensor digiti minimi 79	lateral epicondyle of humerus	extensor expansion of 5th digit	<ul style="list-style-type: none"> <li>extends 5th digit</li> </ul>	Posterior interosseous nerve, deep branch of radial nerve	
	Extensor pollicis longus 80	posterior surface of middle 3rd of ulna	base of distal phalanx of thumb	<ul style="list-style-type: none"> <li>extends thumb</li> </ul>	Posterior interosseous nerve	
	Abductor pollicis longus 81	posterior surface of radius & ulna	base of 1st metacarpal & trapezium	<ul style="list-style-type: none"> <li>abducts &amp; extends thumb</li> </ul>	Posterior interosseous nerve	

	Name	Origin	Insertion	Action	Nerve	
THIGH MOVERS	Satorius 82	anterior superior iliac spine	medial aspect of proximal tibia	• flexes, abducts & laterally rotates the thigh • flexes knee (weak)	Femoral nerve	
	Iliopsoas Iliacus 83	iliac fossa & crest, lateral sacrum	lesser trochanter of femur	• prime mover of thigh flexion • lateral flexion of vertebral column (psoas)	Femoral nerve	
	Iliopsoas Psoas major 84	transverse processes of L1-L5, bodies & discs of T12-L5	lesser trochanter of femur		Ventral nerve	
	Pectenaeus 85	pectenaeal line of pubis	inferior from lesser trochanter to linea aspera	• adducts, flexes & medially rotates thigh	Femoral & obturator nerve	
	Gracilis 86	inferior ramus & body of pubis, ischial ramus	medial surface of tibial shaft just inferior to medial condyle	• adducts thigh • flexes & medially rotates leg (when walking)	Obturator nerve	
	Adductor magnus 87	ischial & pubic rami, ischial tuberosity	linea aspera & adductor tubercle of femur	• adducts & medially rotates thigh (anterior part) • synergist of hamstring in thigh extension (posterior part)	Obturator nerve	
	Adductor longus 88	pubic near pubic symphysis	linea aspera	• adducts, flexes & medially rotates thigh	Anterior division of obturator nerve	
	Tensor fasciae latae 89	anterior iliac crest & anterior superior iliac spine	iliotibial tract	• flexes & abducts thigh (synergist of iliopsoas & gluteus muscles) • rotates thigh medially • steadies the trunk by pulling iliotibial tract taut (locking the knee)	Superior gluteal nerve	
	Gluteus maximus 90	dorsal ilium, sacrum & coccyx	gluteal tuberosity of femur, iliotibial tract	• major extensor of thigh • laterally rotates & abducts thigh • inactive during standing	Inferior gluteal nerve	
	Gluteus medius 91	lateral surface of ilium between anterior & posterior gluteal lines	via short tendon into lateral aspect of greater trochanter	• abducts thigh • anterior part rotates hip medially • posterior part rotates hip laterally	Superior gluteal nerve	
	Gluteus minimus 92	dorsal ilium between anterior & inferior gluteal lines	superior border of greater trochanter of femur	• abducts & medially rotates thigh	Superior gluteal nerve	