The Musculoskeletal System (Upper Body)

Instructor Lesson Plan

Time Required: 6 Hours

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| Lesson Description |
| The information below provides the instructor with an overview of the lesson and the materials that are required to effectively present this instruction. |
| TMS # | 4178976 |
| Prerequisites | Prior to this lesson, the Rating Veteran Service Representatives (RVSRs) Trainees should have completed Challenge Training. |
| target audience | The target audience for the upper musculoskeletal systemis RVSR (Post Challenge).Although this lesson is targeted to teach the RVSR (Post Challenge) employee, it may be taught to other VA personnel as mandatory or refresher type training. |
| Time Required | 6 hour |
| Materials/TRAINING AIDS | Lesson materials:* The Upper Musculoskeletal SystemPowerPoint Presentation
* The Upper Musculoskeletal System Trainee Handouts
* The UpperMusculoskeletal System Job Aid
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| Training Area/Tools  | The following are required to ensure the trainees are able to meet the lesson objectives: * Classroom or private area suitable for participatory discussions
* Seating, writing materials, and writing surfaces for trainee note taking and participation
* Handouts, which include a practical exercise
* Large writing surface (easel pad, chalkboard, dry erase board, overhead projector, etc.) with appropriate writing materials
* Computer with PowerPoint software to present the lesson material

Trainees require access to the following tools: * VA TMS to complete the assessment
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| Pre-Planning  | * Become familiar with all training materials by reading the Instructor Lesson Plan while simultaneously reviewing the corresponding PowerPoint slides. This will provide you the opportunity to see the connection between the Lesson Plan and the slides, which will allow for a more structured presentation during the training session.
* Become familiar with the content of the trainee handouts and their association to the Lesson Plan.
* Practice is the best guarantee of providing a quality presentation. At a minimum, do a complete walkthrough of the presentation to practice coordination between this Lesson Plan, the trainee handouts, and the PowerPoint slides and ensure your timing is on track with the length of the lesson.
* Ensure that there are copies of all handouts before the training session.
* When required, reserve the training room.
* Arrange for equipment such as flip charts, an overhead projector, and any other equipment (as needed).
* Talk to people in your office who are most familiar with this topic to collect experiences that you can include as examples in the lesson.
* This lesson plan belongs to you. Feel free to highlight headings, key phrases, or other information to help the instruction flow smoothly. Feel free to add any notes or information that you need in the margins.
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| Training Day  | * Arrive as early as possible to ensure access to the facility and computers.
* Become familiar with the location of restrooms and other facilities that the trainees will require.
* Test the computer and projector to ensure they are working properly.
* Before class begins, open the PowerPoint presentation to the first slide. This will help to ensure the presentation is functioning properly.
* Make sure that a whiteboard or flip chart and the associated markers are available.
* The instructor completes a roll call attendance sheet or provides a sign-in sheet to the students. The attendance records are forwarded to the Regional Office Training Managers.
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| Introduction to The Musculoskeletal System (Upper Body) |
| INSTRUCTOR INTRODUCTION | Complete the following:* Introduce yourself
* Orient learners to the facilities
* Ensure that all learners have the required handouts
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| time required | .5 hours |
| Purpose of LessonExplain the following: | This lesson is intended to provide you with an understanding of the basic principles for applying the Rating Schedule in evaluating upper musculoskeletal disabilities. This lesson will contain discussions and exercises that will allow you to gain a better understanding of: * Evaluation Considerations
* Rating the Upper Musculoskeletal system
* Arthritis, Acute, Subacute, or Chronic Diseases
* Prosthetic Implants and Anatomical Loss and Loss of Use
* Muscle Injuries/Groups
 |
| Lesson ObjectivesDiscuss the following:Slide 2 Handout 2 | In order to accomplish the purpose of this lesson, the RVSR will be required to accomplish the following lesson objectives.TheRVSRwill be able to: * Demonstrate through discussion and exercise a general understanding of the basic principles for applying the Rating Schedule in evaluating upper musculoskeletal disabilities
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| Explain the following: | Each learning objective is covered in the associated topic. At the conclusion of the lesson, the learning objectives will be reviewed.  |
| Motivation | Understading the musculoskeletal rating criteria and correctly applying it is a very important part of your responsibilities as Orthopedic injuries are perhaps the most common disabilities encountered by the Rating Specialist.  |
| STAR Error code(s) | B2, C1, C2, D1 |
| ReferencesSlide 3 & 4 Handout 3 | Explain where these references are located in the workplace.All M21-1 references are found in the [Live Manual Website](https://vaww.compensation.pension.km.va.gov/).* [**38 CFR 4.26 Bilateral factor**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_26.htm)
* [**38 CFR 4.40 Functional loss**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_40.htm)
* [**38 CFR 4.43 Osteomyelitis**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_43.htm)
* [**38 CFR 4.44 The Bones**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_44.htm)
* [**38 CFR 4.45 The joints**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_45.htm)
* [**38 CFR 4.55 Principles of combined ratings for muscle injuries**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_55.htm)
* [**38 CFR 4.56 Evaluation of muscle disabilities**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_56.htm)
* [**38 CFR 4.58 Arthritis due to strain**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_58.htm)
* [**38 CFR4.59 Painful motion**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_59.htm)
* [**38 CFR 4.61 Examination**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_61.htm)
* [**38 CFR 4.62 Circulatory disturbances**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_62.htm)
* [**38 CFR 4.63 Loss of use of hand or foot**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_63.htm)
* [**38 CFR 4.66 Sacroiliac joint**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_66.htm)
* [**38 CFR 4.68 Amputation rule**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_68.htm)
* [**38CFR 4.69 Dominant hand**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_69.htm)
* [**38 CFR 4.71 Measurement of ankylosis and joint motion**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_71.htm)
* [**38 CFR 4.71a Schedule of Ratings-Musculoskeletal System**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_71a.htm)
* [**38 CFR 4.73 Schedule of Ratings-Muscle Injuries**](http://vbaw.vba.va.gov/bl/21/publicat/Regs/Part4/4_73.htm)
* [**M21-1, Part III, Subpart iv.3.D - Examination Reports**](https://vaww.compensation.pension.km.va.gov/system/templates/selfservice/va_ka/)
* [**M21-1, Part III, Subpart iv, 4, A - Musculoskeletal Conditions**](https://vaww.compensation.pension.km.va.gov/system/templates/selfservice/va_ka/)
* [**M21-1, Part III, Subpart iv, 6, D - Codesheet Section**](https://vaww.compensation.pension.km.va.gov/system/templates/selfservice/va_ka/)
* [**Jones v. Principi - No. 01-291 August 26, 2004**](https://vaww.compensation.pension.km.va.gov/system/templates/selfservice/va_ka/portal.html?portalid=554400000001034)
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| Topic 1: Evaluation Considerations |
| Introduction | This topic will allow the trainee to recognize the general considerations of evaluating upper musculoskeletal conditions. |
| Time Required | 1 hour |
| OBJECTIVES/Teaching Points | Topic objectives:* Recognize general considerations for rating upper musculoskeletal conditions

The following topic teaching points support the topic objectives: * Functional loss
* Major and minor joints
* Painful motion
* Dominant Hand
* Circulatory Disturbances
* Medical Examination
* Amputation Rule
 |
| Functional Loss*Review 38 CFR 4.40 and 4.45*Slide 5 - 7Handout 4 | Explain the importance of considering functional loss in determining the assigned evaluation. Emphasize the importance of having the examiner consider the provisions of DeLuca v. Brown, 1995, in reporting clinical findings and range of motion studies. Consider entitlement to an increased evaluation due to additional loss of range of motion caused by such factors as weakened movement, excess fatigability, incoordination, and pain when evaluating functional loss. |
| Major and Minor JointsSlide 8 & 9Handout 5 | Explain the difference between major joints and groups of minor when rating disabilities of arthritis. |
| Painful MotionSlide 10Handout 5 | Review 38 CFR 4.59 which provides that findings of painful, unstable, or malaligned joints due to healed injury should be entitled to at least the minimum compensable evaluation for the joint. For a claimant with a shoulder disability resulting in painful motion of the shoulder joint, the appropriate DC for the joint involved would be 38 CFR 4.71a, DC 5201, and 20 percent would be the minimum compensable rating. |
| Dominant HandSlide 11Handout 6 | Review 38 CFR 4.62 which provides that any circulatory disturbance, especially of the lower extremity following injury in the popliteal space, must not be overlooked, and requires rating generally as phlebitis. |
| Circulatory Disturbances*Slide 12**Handout 6*Medical ExaminationsM21-1MR, III, iv.3.AM21-1MR, III, iv.3.BSlide 13Handout 6 | Discuss 38 CFR 4.62 |
| Refer students to this section in the Handout. Emphasize the importance of adequate examinations, and discuss local procedures for returning inadequate VA examination reports (VAE). Explain that we need the examiner to not only fully report the Veteran’s subjective complaints, objective clinical findings, and results of range of motion studies, but also furnish evidence of any additional loss of range of motion due to weakness, fatigue, incoordination, and pain. Emphasize the importance of VA examiner correlation of x-ray studies, lab work, or other tests done in conjunction with a VAE. Explain that often, the examination report lacks the examiner’s comments on the results of such additional studies. |
| Amputation RuleSlide 14Handout 7 | Review 38 CFR 4.68.Emphasize that a combined evaluation for disabilities affecting a certain extremity shall not exceed the evaluation assigned for the amputation of that extremity were such amputation performed. Explain that this rule applies to musculoskeletal conditions only and that other, unrelated disabilities affecting the extremity can combine at a rate higher than the elective amputation site. |
| Topic 2: Rating the Upper Musculskeletal System |
| Introduction | This topic will allow the trainee to understanding how to apply the rating schedule to conditions of the upper musculoskeletal system |
| Time Required | 1 hour |
| OBJECTIVES/Teaching Points | Topic objectives:* Demonstrate a general understanding of the basic principles for applying the Rating Schedule in evaluating musculoskeletal disabilities.

The following topic teaching points support the topic objectives: * The Skull
* The Ribs
* The Spine
* Removal of the Coccyx
 |
| The Skull*DC 5296*Slide 15Handout 7The RibsSlide 16Handout 8 | DC 5296 provides for separate evaluations when there is loss of both inner and outer tables of the skull. Assign separate evaluations for secondary damage caused by the skull loss, such as epilepsy or paralysis and combined with the skull loss evaluation.The Handout contains a discussion on the method of determining the area of skull loss in square centimeters, as well as a table for converting square centimeters to square inches. A 25-cent piece or 50-cent piece is also a unit of measurement, which the examiner may use in describing the area of skull loss. |
| Explain that resection of the ribs is removal of a portion or part of the rib, and would be rated under DC 5297. The rating schedule provides that the rating for rib resection or removal is not to be applied with ratings for purulent pleurisy, lobectomy, pneumonectomy, or injuries of the pleural cavity, because the evaluations for these other disabilities already takes into account impairment due to corresponding rib removal or rib resection.In contrast a rating for rib resection will be allowed and rated as rib removal when done during thoracoplasty for collapse therapy or to accomplish obliteration of space, and will be combined with the rating for lung collapse, or with the rating for lobectomy, pneumonectomy or the graduated ratings for pulmonary tuberculosis.Refer the student to this section of the Handout. Explain the basic function of the spine and review the spinal conditions defined in the Handout (lumbar strains and sprains, herniated or prolapsed disc, scoliosis, spina bifida, etc.).The Rating Schedule was amended effective September 26, 2003 to provide new diagnostic codes and criteria for the evaluation of the spine. When evaluating conditions of the spine previously evaluated under old criteria, remember that we cannot reduce the evaluation solely because of changes in the rating scheduleExplain that a common theme in low back claims exists where the Veteran establishes service connection for LS with LBP (DC 5237) and develops after service, a herniation of nucleus pulposus, which may possibly lead to more severe complications as contemplated under DC 5243, intervertebral disc syndrome.Discuss that although the HNP developed after service, the rating specialist should not rush to deny service connection for this condition as not incurred in or aggravated by service. It is possible that the Veteran’s service connected LS or LBP disablement progressed to the point of causing muscle spasm, spinal listing and degenerative changes (DC 5237), which ultimately caused the disc herniation. However, medical evidence showing a causal relationship between the Veteran’s HNP and his service connected LS or LBP condition is required before entitlement may be established.DC 5235 provides evaluation criteria for vertebral fracture or dislocation. Explain the criteria for evaluating this condition. Emphasize to the students that a 10 percent evaluation for vertebral deformity alone requires evidence of a vertebral body fracture with loss of 50 percent or more of the height. X-ray evidence is usually required to show evidence of vertebral deformity.Explain that ankylosis is the abnormal mobility of a joint. Complete ankylosis means there is no movement possible. The revised DC 5235 through DC 5243 apply the same criteria when considering limitation of motion and ankylosis in the evaluation criteria of the spineRefer the student to the Disability Benefits Questionaires Switch Board DBQ, which provide the normal ranges of motion for the spine. Review the various planes of motion of the spineExplain that intervertebral disc syndrome, DC 5243, is a condition affecting the layer of fibrocartilage discs between the bodies of the vertebrae. These discs act as cushions absorbing the shocks occurring between vertebrae. Sciatic neuropathy refers to the neurologic impairment due to nerve root impingement or pathology.The Rating Schedule for IVDS was amended effective September 23, 2002. Evaluate under the General Rating Formula for Diseases and Injuries of the Spine or under the formula for Rating Intervertebral Disc Syndrome based on incapacitating episodes, whichever method results in the higher evaluation. Discuss the evaluation criteria for DC 5243.Explain that this refers to an injury or weakness at the point of articulation between the sacrum and the ilium (the wide upper portion of the hip bone), and that it should be rated under DC 5236.Explain that a lumbosacral strain involves injury to the associated muscles, ligaments or tendons of the lumbosacral spine, and will be rated under DC 5237.Discuss Goldthwait’s sign, which is a test used to determine the location of a lesion affecting the low back. With the Veteran lying supine, the examiner raises the leg with one hand, while the other hand is placed under the lower back. Leverage is then applied to the side of the pelvis. If the Veteran feels pain before the lumbar spine is moved, the lesion is a sprain of the sacroiliac joint. If pain does not appear until after the lumbar spine moves, the lesion is in the sacroiliac or lumbosacral articulation (joint).Discuss the evaluation criteria used for lumbosacral strain under DC 5237Explain that DC 5298 is for removal of the coccyx (or tailbone). Review evaluation criteria for this condition in the Rating Schedule |
| The SpineSlide 17 - 20Handout 8Evaluation Considerations;Low Back Pain (LBP), Lumbosacral Strain (LS), and Subsequently Developing Herniation of a Nucleus Pulposus (HNP).Handout 8Residuals of Fracture of VertebraHandout 9Ankylosis and Limitation of Motion of the SpineHandout 9Discuss Note (1)Slide 18Intervertebral Disc Syndrome (IVDS)Handout 10Sacroiliac Injury and WeaknessHandout 10Lumbosacral Strain*Handout 11**Removal of the Coccyx**Handout 11* |
| Topic 3: Arthritis, Acute, Subacute, or Chronic Diseases |
| Introduction | This topic will allow the trainee to understanding how to apply the rating schedule to conditions of the upper musculoskeletal system |
| Time Required | 1 hour |
| OBJECTIVES/Teaching Points | Topic objectives:* Demonstrate a general understanding of the basic principles for applying the Rating Schedule in evaluating musculoskeletal disabilities.

The following topic teaching points support the topic objectives: * Arthritis
* Arthritis, Acute, Subacute, or Chronic Diseases
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| Arthritis*Review CFR 4.58*Slide 21Handout 11 | **Arthritis due to Strain:*** Review CFR 4.58, which provides for establishment of service connection for secondary disabilities that may develop as a result of strain caused by the service connected disability.

**Other Types of Arthritis:*** Review other types of arthritis under DC 5004 through DC 5009. Explain that these are not truly rheumatoid arthritis, but are rated as one would rate rheumatoid arthritis.
* Arthritis due to trauma, DC 5010, results from a direct wound or injury; and like degenerative arthritis, should be substantiated by x-ray findings. Furnish a general definition of each, and discuss how these are evaluated using the Rating Schedule.
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| Arthritis, Acute, Subacute, or Chronic DiseasesSlide 22 - 29Handout 11Handout 13*Handout 14**Handout 15**Handout 16* | Osteomyelitis: * Discuss 38 CFR 4.43, which provides that once established, osteomyelitis should be considered as a continuously disabling process, unless the affected part is removed by amputation or radical resection.
* Review the rating schedule, 4.71a, as it pertains to evaluating disabilities of osteomyelitis, DC 5000. Refer the student to M21-1, Part iii. Subpartiv.4.A.for examples demonstrating the proper rating procedures for osteomyelitis.

Rheumatoid arthritis, rheumatoid arthritis of the spine:* Review the rating schedule, 4.71a, as it pertains to evaluating disabilities of rheumatoid arthritis, DC 5002, explaining that like osteomyelitis, this condition is evaluated as an active or inactive process.

Degenerative arthritis (hypertrophic or osteoarthritis):* Review the rating schedule evaluation criteria as it pertains to evaluating disabilities of degenerative arthritis, DC 5003. Explain that x-ray evidence should be used to substantiate a diagnosis.
* Refer the student to M21-1, Part iii. Subpart iv.4.A for examples of rating degenerative arthritis.

Disposition of arthritis cases previously rated as a single disability:* Assign separate evaluations for each joint affected by arthritis. Rating specialists may encounter cases where arthritis was previously rated as a single disability. These cases will need to be re-rated with each joint separately assigned an evaluation as appropriate. Refer the students to M21-1Part iii. Subpart iv.4 for further information on these procedures.

Caisson disease of bones:* Rate DC 5011, based on chronic residual disabilities, such as arthritis, spinal cord involvement or deafness, depending on the severity of the disability and its manifestations.

New growths of bones:* Malignant new growth of bones, DC 5012, allows for assigning a total 100% evaluation for one year following the cessation of surgical, x-ray, antineoplastic chemotherapy, or other therapeutic procedure. If there is no recurrence or metastases, the evaluation is based on residual disability.

Other disabilities of the bones and joints:* Discuss DC 5013 through DC 5024 using definitions found in the handout and the Merck Manual. Explain that, except for gout, we evaluate these conditions on the same basis as for degenerative arthritis (DC 5003), based on limitation of motion of affected part. The 10 and 20 percent evaluations based solely on x-ray findings do not apply.
* Gout, DC 5017, is to be rated as for rheumatoid arthritis (DC 5002).
* Fibromyalgia: Explain that DC (5025) was included in the rating schedule effective May 7, 1996. Discuss the rating schedule provisions for evaluating fibromyalgia.
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| Topic 4: Prosthetic Implants and Anatomical Loss and Loss of Use |
| Introduction | This topic will allow the trainee to understanding how to apply the rating schedule to conditions of the upper musculoskeletal system |
| Time Required | 1 hour |
| OBJECTIVES/Teaching Points | Topic objectives:* Demonstrate a general understanding of the basic principles for applying the Rating Schedule in evaluating musculoskeletal disabilities.

The following topic teaching points support the topic objectives: * Prosthetic Implants
* Anatomical Loss and Loss of Use
 |
| Prosthetic ImplantsSlide 30Handout 17 | Refer the student to this section of the Handout. Explain that prosthetic implants of joints are artificial, fabricated metal and plastic devices used to replace lost or severely impaired joints and may also be used to relieve pain and restore function and mobility.Describe how the Rating Schedule allows for assignment of a one year temporary total 100 percent evaluation following the replacement (prosthetic implant) of a shoulder, elbow, or wrist joint. The one year period begins after the end of at least a one month total temporary convalescent period following hospital discharge allowed under 38 CFR 4.30. At the conclusion of the one-year period (usually a total of 13 months at 100 percent when entitlement to paragraph 30 benefits is considered), evaluate the residual level of impairment or the minimum level following prosthetic implants, whichever is higher. |
| Anatomical Loss and Loss of Use*Plate IIISlide 31* *Handout 18*Slide 32 Handout 18Slide 33Handout 18Slide 34 - 37 Handout 19Disuss slides 35- 37 as the relate to rating finger amputationsSlide 38 & 39Handout 20Review the evaluation criteria used for DC 5200 through DC 5215.Slide 40 Handout 21 | Loss of use of hand or foot:* Review 38 CFR 4.63, which defines the criteria for loss of use of a hand as it applies to special monthly compensation

Combinations of Anatomical Loss and Loss of Use Disabilities* Describe how DC 5104 through DC 5111 provide for a total 100% evaluation based on combinations of disabilities related to the anatomical loss or loss of use of certain combinations of disabilities. Entitlement to special monthly compensation is established for these combinations.

Amputations of the upper extremities:* Diagnostic codes 5120 through DC 5156 apply to amputations of the upper extremities (arm, hand and fingers).

Note that the evaluations are higher for amputations of the dominant extremity, when compared to the non-dominant.Finger Disabilities:The Rating Schedule was amended effective August 26, 2002 (Supplement No. 30) to provide new tables for evaluation of ankylosis or limitation of motion of single or multiple digits of the hand. This change added DC’s 5228, 5229, and 5230 the same date. These three new codes contemplate limitation of motion of the thumb, index or long finger, and of the ring or little finger, respectively.The fingers are identified by number and name as follows1. or Thumb
2. or Index
3. or Middle
4. or Ring, and
5. or Baby or Pinky

Describe the difficulty in evaluating multiple finger disabilities as there may be amputations at different levels involving more than one finger, or combinations of partial or whole loss of fingers, as well as ankylosed fingers (fingers having limited or no movement). Evaluation is based on consideration of many factors, including the level of amputation and the severity of ankylosis.Have the students review Plate III in the Rating Schedule for an understanding of the anatomy of the hand. Review the following terms;Distal, medial and proximal. - are one of three types of finger bones.Evaluating Multiple Finger Disabilities:Explain that specific directions on how to evaluate a Veteran with multiple disabilities of fingers in the same hand can be found in the rating schedule under the section “multiple finger amputations” following diagnostic code 5151 and immediately following the heading “evaluation of ankylosis or limitation of motion of single or multiple digits of the hand.” Note that attention should be paid to the “note” in each subsection.These instructions are also provided on pages 19 – 21 of the handout.Evaluating Non-Amputation Disabilities of the Upper Extremities:Remind the students that a flail joint is a condition in which active or voluntary motion of a joint is not possible. Nonunion is the failure of the ends of a fractured bone to unite fully on healing. Malunion is the misalignment or faulty union of the ends of fragments of a fractured bone. A dislocation fracture is a fracture occurring near a joint and resulting in dislocation or displacement of the joint.Using Plate I of the Rating Schedule, review the normal ranges of motion of the shoulder, elbow and wrist, and describe the various planes of motion. |

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| Topic 5: Muscle Injuries/Groups |
| Introduction | This topic will allow the trainee to rate muscle injures of the upper musculoskeletal system. |
| Time Required | 1 hour |
| OBJECTIVES/Teaching Points | Topic objectives:* Demonstrate a general understanding of the basic principles for applying the Rating Schedule in evaluating musculoskeletal disabilities.

The following topic teaching points support the topic objectives: * Shoulder Girdle and Arm
* The Torso and Neck
* Miscellaneous
 |
| *Discuss 38 CFR 4.55: Principles of combined ratings for muscle injuries**Slide 41 - 43**Handout 23**Shoulder Girdle and Arm**Muscle Groups I - IV*Slide 41Handout 27 - 28Muscle Groups V& VIMuscle Group VII –IXMuscle Group XIX - XXIIIC 5324 - 5327 | Explain that the Rating Schedule breaks down the muscle groups into five anatomical regions:the shoulder girdle and arm (DC 5301 through DC 5306), the forearm and hand (DC 5307 through DC 5309, the foot and leg (DC 5310 through DC 5312),the pelvic girdle and thigh (DC 5313 through DC 5318), and the torso and neck (DC 5319 through DC 5323). Muscle groups identified by Roman numerals, Group I through Group XXIII, with each having its own diagnostic code.Emphasize that muscles do not usually work in isolation, but may have overlapping functions working in conjunction with other groups of muscles. Consider this in determining evaluations for muscle disabilities.Explain that under DC 5301 through DC 5323, classifications of disabilities resulting from muscle injuries are slight, moderate, moderately severe, or severe.Review the provisions of 38 CFR 4.56 for a description of the evaluation of muscle disabilities.**Shoulder:****Discuss DC 5301 -** 5304 extrinsic and instrinsic muscles are rated from slight to severe with higher evaluations possible for dominant extremity**Elbow: Discuss DC 5305 & 5306** **The forearm and Hand****Discuss DC 5307 Muscles arising from the internal condyle of humerous**Note: The hand is so compact a structure that isolated muscle injuries are rare, being nearly always complicated with injuries of bones, joints, tendons, etc. Rate on limitation of motion, minimum 10 percent**.****The Torso and Neck:**Spinal muscles: Sacrospinalis (erector spinae and its prolongations in thoracic and cervical regions): Muscles of respiration:* Thoracic muscle group.

Muscles of the front of the neck: Muscles of the side and back of the neck: **Miscellaneaous:*** **5324 Diaphragm, rupture of, with herniation.**
* Rate under diagnostic code 7346.
* **5325 Muscle injury, facial muscles.**
* Evaluate functional impairment as seventh (facial) cranial nerve neuropathy (diagnostic code 8207), disfiguring scar (diagnostic code 7800), etc. Minimum, if interfering to any extent with mastication
* **5326 Muscle hernia, extensive.** Without other injury to the muscle
* **5327 Muscle, neoplasm of, malignant** (excluding soft tissue sarcoma)
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| Practical Exercise |
| Time Required | .25 hours |
| EXERCISE | Answer Practical Exercise questions found in Handout on page 32Ask if there are any questions about the information presented in the exercise, and then proceed to the Review. |
| Practical Exercise Slide 44Handout 32 |  |
| Lesson Review, Assessment, and Wrap-up |
| IntroductionDiscuss the following: | The Musculoskeletal System (Upper Body) lesson is complete. Review each lesson objective and ask the trainees for any questions or comments. |
| Time Required | .25 hours  |
| Lesson Objectives | You have completed the The Musculoskeletal System (Upper Body) lesson. The trainee should be able to: * Demonstrate through discussion and exercise a general understanding of the basic principles for applying the Rating Schedule in evaluating upper musculoskeletal disabilities
 |
| Assessment  | Remind the trainees to complete the on-line assessment in TMS to receive credit for completion of the course.The assessment will allow the participants to demonstrate their understanding of the information presented in this lesson. |