

6. The selected procedure(s) for Round Two, in the form of a written scenario, will be presented to the competitor at the start of the skill to be performed. The timing for the skill will begin when the scenario is presented. The scenario will be the same for each competitor and will include a challenging component that will require the competitor to apply critical thinking skills.
7. In case of a tie, the highest test score will be used to determine the rank.
8. Competitors must complete all steps of the procedure listed in the guidelines even if the steps must be simulated/verbalized.
9. Competitors will be stopped at the end of the time allowed for a selected procedure(s).
10. Competitors must bring all items noted with *** in the materials section of these guidelines to the event. Beginning in 2004-05, competitors will provide their own underwrap and athletic tape.
11. Competitors must be familiar with and adhere to the **"General Rules and Regulations of the National HOSA Competitive Events Program."**

Required Personnel

1. One Event Manager per event
 2. One Section Leader per section
 3. One judge per procedure selected per section (with expertise in the specific skill area)*
 4. Proctors for testing
 5. One-two Courtesy Corps per section
 6. One-two patients as required by the scenario (per section)
 7. Holding room attendants(s)
 8. Timekeepers (if necessary)
- * One judge will role-play the athletic trainer.

Facilities, Equipment and Materials (Per Section)

General

1. Clinical and/or laboratory stations for selected procedures
2. Holding rooms or areas for competitors
3. Written scenario (one copy per competitor and judge)
4. Calculators, note pads, pencils for judges
5. Certificates for each of competitors after Round One.
6. Event evaluations
7. Stopwatch(s)
- *** 8. Watch with a second hand
- *** 9. Pens and Pencils.

Round One

Written Test (Reference: All resources)

1. One test copy per competitor
2. Scantron forms
3. Paper for scratch paper/cover sheet

Round Two

Procedure I

Flexibility and Stretching (Reference: Clover)

1. Exercise mat
2. Chair
3. Copy of *Sports Medicine Essentials* by Clover, Jim, for use by judges.

- Procedure II Measuring Body Fat Using a Skinfold Caliper** (Reference: Clover)
1. Caliper
 2. Copy of Skinfold Measurements and Percent of Body Fat table
 - *** 3. Notepad and pencil
 4. Copy of *Sports Medicine Essentials* by Clover, Jim, for use by judges.

- Procedure III Assess ROM and Strength Testing** (Reference: Clover)
1. Exam table or chair
 2. Copy of *Sports Medicine Essentials* by Clover, Jim, for use by judges.

- Procedure IV Taping** (Reference: Clover)
1. Tape adherent spray
 - *** 2. Underwrap of any size, color or type
 3. Treatment table or chair(s)
 - *** 4. Athletic tape of any size, color or type
 5. Taping (heel and lace) pad (procedure B)
 - *** 6. Tape scissors
 7. Copy of *Sports Medicine Essentials* by Clover, Jim, for use by judges.

SPORTS MEDICINE

Competitor #: _____ Judge's Signature: _____

Procedure I	Physical Conditioning (Time: 15 minutes)	Possible	Allocated
1.	Obtained instructions from athletic trainer	1	
2.	Performed general warm-up (gentle twisting, bending and joint rotations) (approximately 1 minute)	2	
3.	Completed warm-up by jogging in place until light sweat (approximately 2 minutes)	2	
4.	<p>The athletic trainer will indicate a specific stretch. The competitor will verbalize the involved muscle group, then perform the stretch by moving to a moderate stretch position for 15-30 seconds (One repetition per stretch, stretching one side and then the other), inhaling and exhaling at a relaxed rate. (Note: the athletic trainer will inform the competitor of the 10 stretches to be performed.)</p> <p><i>Each stretch earns a maximum possible 4 points. (1 point for correct verbalization of muscle group, 1 point for proper breathing, and 2 points for executing the stretch correctly.)</i></p> <ul style="list-style-type: none"> • Lateral neck stretch _____ • Chest stretch _____ • Anterior deltoid stretch _____ • Posterior deltoid stretch _____ • Triceps stretch _____ • Wrist stretch _____ • Back extension/abdominals stretch _____ • Low back stretch (one knee) _____ • Low back stretch (both knees) _____ • Cat stretch (low back) _____ • Hip flexor stretch _____ • Hip/trunk stretch _____ • Groin stretch (butterfly) _____ • Lying hamstring stretch _____ • Standing quadriceps stretch _____ • Gastrocnemius stretch _____ • Soleus stretch _____ 	40	
5.	Responded appropriately to judge's question " Explain the difference between isotonic, isometric and isokinetic exercise."	2	
TOTAL POINTS -- PROCEDURE I		47	

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SPORTS MEDICINE

Competitor #: _____ Judge's Signature: _____

Procedure II	Measuring Body Fat Using a Skinfold Caliper (15 minutes)	Possible	Allocated
1.	Obtained instructions from athletic trainer	1	
2.	Took all skinfold measurements from the right side of the body.	2	
3.	Instructed the athlete to stand with his or her arms resting comfortably as the sides.	2	
4.	Triceps		
a.	Used the thumb and index finger to pinch up a fold of skin, including the subcutaneous fat, and gently pulled it away from the muscle at a location halfway between the shoulder and tip of the elbow on the posterior surface of the upper arm in a vertical direction, parallel to the humerus.	3	
b.	Positioned the caliper about 1 cm below the fingers that are creating the skinfold. Advanced the caliper to a depth that is equivalent to the thickness of the fold.	2	
c.	Kept a firm hold on the fold with the fingers so that the calipers only measure the thickness of the fold.	1	
d.	Waited a few seconds for the calipers to "creep" a little.	1	
e.	Read the measurement on the caliper in millimeters.	2	
5.	Biceps		
a.	Used the thumb and index finger to pinch up a fold of skin, including the subcutaneous fat, and gently pulled it away from the muscle at a location halfway between the bend of the elbow and the top of the shoulder on the anterior surface of the upper arm in a vertical direction, parallel to the humerus.	3	
b.	Positioned the caliper about 1 cm below the fingers that are creating the skinfold. Advanced the caliper to a depth that is equivalent to the thickness of the fold.	2	
c.	Kept a firm hold on the fold with the fingers so that the calipers only measure the thickness of the fold.	1	
d.	Waited a few seconds for the calipers to "creep" a little.	1	
e.	Read the measurement on the caliper in millimeters.	2	

Procedure II Measuring Body Fat (continued)		Possible	Allocated
6.	Subscapula		
a.	Used the thumb and index finger to pinch up a fold of skin, including the subcutaneous fat, and gently pulled it away from the muscle at a location below the shoulder blade on the posterior side of the torso at a 45° angle to the spine.	3	
b.	Positioned the caliper about 1 cm below the fingers that are creating the skinfold. Advanced the caliper to a depth that is equivalent to the thickness of the fold.	2	
c.	Kept a firm hold on the fold with the fingers so that the calipers only measure the thickness of the fold.	1	
d.	Waited a few seconds for the calipers to “creep” a little.	1	
e.	Read the measurement on the caliper in millimeters.	2	
7.	Supra-iliac		
a.	Used the thumb and index finger to pinch up a horizontal fold of skin, including the subcutaneous fat, and gently pulled it away from the muscle at a location just above the iliac crest on the anterior surface of the torso.	3	
b.	Positioned the caliper about 1 cm below the fingers that are creating the skinfold. Advanced the caliper to a depth that is equivalent to the thickness of the fold.	2	
c.	Kept a firm hold on the fold with the fingers so that the calipers only measure the thickness of the fold.	1	
d.	Waited a few seconds for the calipers to “creep” a little.	1	
e.	Read the measurement on the caliper in millimeters.	2	
8.	Added the results of the four measurements together.	1	
9.	Used the Skinfold Measurements and Percent of Body Fat Table (Clover) and reported the percent of body fat to the Athletic Trainer.	2	
TOTAL POINTS -- PROCEDURE II		44	

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SPORTS MEDICINE

Competitor #: _____ Judge's Signature: _____

Procedure III-A	Assess ROM and Strength Testing of Shoulder (Time: 15 minutes)	Possible	Allocated
1.	Obtained instructions from athletic trainer	1	
2.	ROM Test for External Rotation of the Shoulder <ul style="list-style-type: none"> a. Asked athlete to place his or her hands above his or her head b. Instructed athlete to externally rotate the shoulders by reaching down toward the shoulder blades as far as possible. c. Stepped behind athlete to evaluate results. d. Reported observations to the athletic trainer. 	1 2 1 2	
3.	ROM Test for Internal Rotation of the Shoulder <ul style="list-style-type: none"> a. Asked athlete to grasp his or her hands behind the back. b. Instructed athlete to internally rotate the shoulders by raising the hands as high as possible, keeping the hands behind the back. c. Stepped behind athlete to evaluate results. d. Reported observations to the athletic trainer. 	1 2 1 2	
4.	Specific ROM Tests for the Shoulder <ul style="list-style-type: none"> a. Asked athlete to perform adduction, abduction, flexion, extension, horizontal adduction and horizontal abduction through a pain-free range of motion. b. Reported observations to the athletic trainer 	6 2	
5.	External Rotation Strength Test for the Shoulder <ul style="list-style-type: none"> a. Facing the athlete, placed hands on the lateral sides of the athlete's wrists. b. Instructed athlete to externally rotate his or her arms and push against your hands isometrically (increasing the tension of the muscle without movement of the joint). c. Reported observations to the athletic trainer 	2 2 2	

Procedure III-A Assess ROM and Strength Testing of Shoulder		Possible	Allocated
6.	Internal Rotation Strength Test for the Shoulder		
a.	Facing the athlete, placed hands on the medial sides of the athlete's wrists.	2	
b.	Instructed athlete to internally rotate his or her arms and push against your hands isometrically.	2	
c.	Reported observations to the athletic trainer.	2	
7.	Extension Strength Test for the Shoulder		
a.	Placed your hand on the posterior aspect of the athlete's elbow.	2	
b.	Instructed athlete to push backward against your hand isometrically.	2	
c.	Reported observations to the athletic trainer.	2	
8.	Flexion Strength Test for the Shoulder		
a.	Placed your hand on the anterior aspect of the athlete's elbow.	2	
b.	Instructed athlete to push forward against your hand isometrically.	2	
c.	Reported observations to the athletic trainer.	2	
9.	Empty Can Test		
a.	Instructed athlete to extend both arms forward at a 90° angle to the body while horizontally abducting the arm to a 30° angle.	2	
b.	Instructed athlete to internally rotate his or her arms as much as possible, turning the thumbs down, and to hold this position while you push down on his or her wrists.	2	
c.	Reported observations to the athletic trainer	2	
TOTAL POINTS -- PROCEDURE III-A		51	

* Note: Abduction and adduction strength tests will not be evaluated.

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SPORTS MEDICINE

Competitor #: _____ Judge's Signature: _____

Procedure III-B	Assess ROM and Strength Testing of Ankle and Foot (Time: 15 mins)	Possible	Allocated
1.	Obtained instructions from athletic trainer	1	
2.	Asked athlete to lie supine or sit on a table with feet hanging over the edge.	1	
3.	ROM Test for Ankle Inversion		
	a. Instructed athlete to turn both ankles in so that the soles of the feet begin to face each other. Observed and compared bilaterally.	2	
	b. Checked passive ROM by applying controlled force to the feet as the athlete repeats step a above.	2	
	c. Reported observations to the athletic trainer.	2	
4.	ROM Test for Ankle Eversion		
	a. Instructed athlete to turn both ankles out so that the soles of the feet face away from each other. Observed and compared bilaterally.	2	
	b. Checked passive ROM by applying controlled force to the feet as the athlete repeats step a above.	2	
	c. Reported observations to the athletic trainer.	2	
5.	ROM Test for Plantar Flexion of the Ankle		
	a. Instructed athlete to extend both ankles so the toes extend as far away from his/her body as possible. Observed and compared bilaterally.	2	
	b. Checked passive ROM by applying controlled force to the feet as the ankles go through the ROM described above.	2	
	c. Reported observations to the athletic trainer	2	
6.	ROM Test for Dorsiflexion of the Ankle		
	a. Instructed athlete to flex both ankles so the toes move closer to his or her body. Observed and compared bilaterally.	2	
	b. Checked passive ROM by applying controlled force to the feet as the ankles go through the ROM described above.	2	
	c. Reported observations to the athletic trainer	2	

Procedure III-B Assess ROM and Strength Testing of Ankle and Foot		Possible	Allocated
7.	Inversion Strength Test for the Ankle		
a.	Made hands into fists and placed them together between the athlete's feet, near the toes.	2	
b.	Applied isometric resistance and instructed the athlete to push medially against your hands at the same time.	2	
c.	Reported observations to the athletic trainer	2	
8.	Eversion Strength Test for the Ankle		
a.	Placed hands on the outer aspect of both the athlete's feet, near the toes.	2	
b.	Applied isometric resistance and instructed the athlete to push laterally against your hands at the same time.	2	
c.	Reported observations to the athletic trainer	2	
9.	Plantar Flexion Strength Test for the Ankle		
a.	Placed hands on the underside of both the athlete's feet, near the toes.	2	
b.	Applied isometric resistance and instructed the athlete to push downward, away from his or her body.	2	
c.	Reported observations to the athletic trainer	2	
10.	Dorsiflexion Strength Test for the Ankle		
a.	Placed hands on the distal portion of both the athlete's feet, backs of your hands facing the athlete.	2	
b.	Applied isometric resistance and instructed the athlete to pull his or her feet back towards the body.	2	
c.	Reported observations to the athletic trainer	2	
TOTAL POINTS -- PROCEDURE III-B		50	

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SPORTS MEDICINE

Competitor #: _____ Judge's Signature: _____

Procedure IV-A	Taping – Basic Ankle Strapping (Time: 5 mins)	Possible	Allocated
1.	Obtained instructions from athletic trainer	1	
2.	Assembled equipment	1	
3.	Greeted and identified athlete	1	
4.	Identified self and explained procedure	3	
5.	Positioned athlete sitting on a table with the foot/ankle extended over the edge, or in a chair with the leg on a second chair.	2	
6.	Instructed athlete to hold foot in neutral position (neither turned in nor out) and dorsiflexed (toes to nose) slightly to approximately a 90° angle.	2	
7.	Sprayed area with tape adherent	2	
8.	Applied underwrap to foot and ankle, one layer thick	2	
9.	Placed the first strip of tape around the leg above the ankle followed by a second anchor strip slightly below and overlapping the first	2	
10.	Applied an anchor at the instep over the hook of the fifth metatarsal.	2	
11.	Applied a second anchor at the instep with an overlap one-half to two-thirds of the previous strip	2	
12.	Applied the first stirrup beginning on the medial aspect of the ankle and continuing down, over, and behind the medial malleolus, under the foot and arch, up the lateral aspect of the foot, over and behind the lateral malleolus, and torn off at the upper anchor.	2	
13.	Applied the first horizontal strip, starting on the medial aspect of the lower anchor, carried over and below the medial malleolus, behind the Achilles tendon, then around the ankle, over and below the lateral malleolus, and across the dorsum of the foot, tearing the tape off where the strip was started.	2	
14.	Applied successive sets of interlocking stirrups and horizontal strips, again overlapping the tape one-half to two-thirds of the width.	4	
15.	Tape is smooth and snug with all pieces overlapped and joined.	2	
16.	Applied heel lock strip by attaching the tape to the lateral aspect of the heel, coming across the dorsum of the foot and angling underneath the arch, then crossing on the outside of the heel, and progressing behind the heel to come up over and above the medial malleolus.	2	
17.	Continued the strip around the ankle and brought down the inside of the heel, then wrapped it under the arch and passed just anterior to the lateral malleolus, bringing the strip back to the starting point and tearing the tape.	2	

Procedure IV-A	Taping – Basic Ankle Strapping (continued)	Possible	Allocated
18.	Continued the tape upward in a spiral fashion until the cylindrical portion of the lower leg is passed.	2	
19.	Applied new strip in the angle fashion described at the beginning of this taping procedure as the finish strip that ties in all of the ends.	2	
20.	All tape applied snugly but not so tightly as to compromise circulation.	2	
21.	Allowed tape to fit the natural contour of the skin	2	
22.	Upon direction of the athletic trainer, properly used tape scissors to remove taping	2	
23.	Disposed of used taping materials	1	
24.	Replaced equipment	1	
25.	Reported procedure and observations to the athletic trainer	2	
TOTAL POINTS -- PROCEDURE IV-A		47	

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SPORTS MEDICINE

Competitor #: _____ Judge's Signature: _____

Procedure IV-B	Taping – Arch Taping	(Time: 5 mins)	Possible	Allocated
1.	Obtained instructions from athletic trainer		1	
2.	Assembled equipment		1	
3.	Greeted and identified athlete		1	
4.	Identified self and explained procedure		3	
5.	Positioned athlete sitting on a table with the foot/ankle extended over the edge, or in a chair with the leg on a second chair.		2	
6.	Sprayed area with tape adherent		2	
7.	Applied a section of taping (heel and lace) pad to a 6" strip of elastic tape.		2	
8.	Secured the cushioned tape to the heel.		2	
9.	Applied the first strip of 1" tape from behind the heads of the metatarsals and extending over the heel approximately 1" to 1½" beyond the rounded corner of the heel.		2	
10.	Applied five subsequent strips of tape in a similar manner, fanned to the medial and lateral borders of the foot, respectively. The fan pattern extends from the head of the first metatarsal to the head of the fifth.		2	
11.	All strips converge at the heel where they go over the rounded contour into a single unit.		2	
12.	Applied a sixth supporting strip over the center of the fan pattern.		2	
13.	Instructed athlete to relax the foot and then pressed adhesive tape upward and contoured to the skin, thereby tightening the arch.		2	
14.	Applied the next strip of tape so it begins just beyond the head of the first metatarsal, and runs diagonally across the plantar aspect of the foot to the lateral portion of the heel where it traverses around the heel to lock in the end of the fan strips. Then the strip is brought forward over the medial aspect of the foot to the origin of the tape.		2	
15.	Applied additional overlapping strips in a similar manner from the head of the first metatarsal.		2	
16.	Applied additional support strips in the same manner from the head of the fifth metatarsal and returned to the head of the fifth metatarsal.		2	
17.	Applied two strips to anchor the distal end of the taping, with the ends carried singly to the dorsum of the foot and tacked down. The second strip is applied in an overlapping and like manner.		2	
18.	Using 1½" nonelastic tape, started on the dorsum of the foot, extended over the lateral border under the plantar surface, and then wrapped over the medial border of the foot to its origin, where the strip is torn off.		2	

Procedure IV-B	Taping – Arch Taping	(continued)	Possible	Allocated
19.	Applied three additional overlapping strips in a similar manner to complete the arch support taping.		2	
20.	Completed the procedure with circumferential wrapping with elastic tape beginning at the forefront and ending at the arch.		2	
21.	Upon direction of the athletic trainer, properly used tape scissors to remove taping		2	
22.	Disposed of used taping materials		1	
23.	Replaced equipment		1	
24.	Reported procedure and observations to the athletic trainer		2	
TOTAL POINTS -- PROCEDURE IV-A			44	

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SPORTS MEDICINE

Competitor #: _____ Judge's Signature: _____

Procedure IV-C	Taping – Elbow Taping	(Time: 5 mins)	Possible	Allocated
1.	Obtained instructions from athletic trainer		1	
2.	Assembled equipment		1	
3.	Greeted and identified athlete		1	
4.	Identified self and explained procedure		3	
5.	Positioned athlete sitting on an exam table or in a chair with the affected arm extended.		2	
6.	Sprayed area with tape adherent.		2	
7.	Applied underwrap to the arm over the limits of the taping procedure.		2	
8.	Applied elastic tape anchors at the proximal and distal ends.		2	
9.	Positioned the arm so that the angle of the elbow is slightly more acute than that angle where discomfort begins so as to allow for slight slippage.		2	
10.	Applied a series of 7-9 nonelastic support strips between the two anchors. The strips are fanned and overlapped, forming an "X" or a butterfly pattern with the strips overlapping in the antecubital space.		2	
11.	Applied elastic tape that is spiraled circumferentially over the support tape.		2	
12.	Tape is smooth and snug with all pieces overlapped and joined.		2	
13.	All tape applied snugly but not so tightly as to compromise circulation.		2	
14.	Upon direction of the athletic trainer, properly used tape scissors to remove taping		2	
15.	Disposed of used taping materials		1	
16.	Replaced equipment		1	
17.	Reported procedure and observations to the athletic trainer		2	
TOTAL POINTS -- PROCEDURE IV-D			30	

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SPORTS MEDICINE

Competitor #: _____ Judge's Signature: _____

Procedure IV-D	Taping – Restriction of Thumb Flexion, Extension, and Abduction (Time: 5 mins)	Possible	Allocated
1.	Obtained instructions from athletic trainer	1	
2.	Assembled equipment	1	
3.	Greeted and identified athlete	1	
4.	Identified self and explained procedure	3	
5.	Positioned athlete sitting on an exam table or in a chair with the affected arm extended.	2	
6.	Sprayed area with tape adherent.	2	
7.	Applied underwrap to the hand and wrist	2	
8.	Applied 1" tape anchors just above the first joint of the thumb, just above the knuckles of the hand and approximately 4" above the wrist bones.	2	
9.	Applied three strips of tape that traverse across the back of the thumb, the hand, and the wrist to reduce thumb flexion.	2	
10.	Applied 2-3 strips from the back of the thumb and across the dorsum of the hand to reduce thumb abduction.	2	
11.	Applied an anchor strip of 1" tape around the ends of tape on the thumb.	2	
12.	Applied elastic tape as a cover, beginning proximally above the wrist joint and working down across the hand in a figure-8 pattern around the thumb and back of the hand.	2	
13.	All tape applied snugly but not so tightly as to compromise circulation.	2	
14.	Upon direction of the athletic trainer, properly used tape scissors to remove taping	2	
15.	Disposed of used taping materials	1	
16.	Replaced equipment	1	
17.	Reported procedure and observations to the athletic trainer	2	
TOTAL POINTS -- PROCEDURE IV-D		30	

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