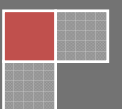




# NCOPE Orthotic Fitter Course Approval Standards

The standards for the delivery and content of Orthotic Fitter Courses have been established to provide guidance to the presenters and sponsors of both online and seated educational courses. The intent of the standards is to ensure that the didactic and lab portions of the course are representative of current Orthotic Fitter practice and that the provisions of orthotic devices are appropriate and safe for the patient. The mechanisms used for formulating the standards to determine course and lab content were surveys, survey analysis, focus groups, subject-matter expert committees and psychometric consultants.

Effective December 1, 2010



## **NCOPE Orthotic Fitter Course Approval Requirements**

### **Course Length**

A minimum of 32 hours in length, including a minimum of 16 hours of didactic and a minimum of 16 hours of in-person fitting lab.

### **Instructor Credentials**

The instructor must hold either a certified orthotist or certified orthotic fitter credential.

### **Course Content Didactic and Lab**

Students must have comprehensive exposure to all of the content listed below. At the completion of the course, students must have a basic knowledge of these content areas and an understanding of the devices and the appropriate use of the devices as they relate to patient care. The students must have been assessed in their knowledge and use of the specific devices as they relate to patient care. Course content outside of the ABC Orthotic Fitter Scope of Practice will not be counted toward the Orthotic Fitter minimum time requirement. Course content outside of the ABC Orthotic Fitter Scope of Practice is not recommended.

The specific content areas are:

Orthotic Fitter Knowledge and Skill statements **(See Appendix A)**

Required pathologies **(See Appendix B)**

Required devices **(See Appendix C)**

Professional ethics **(See ABC Code of Professional Responsibility)**

Practice management/HIPAA **(See Orthotic Fitter Knowledge and & Skill statements/Appendix A)**

### **Course Delivery Format**

Didactic - seated or distance **(See course delivery requirements for distance learning, Appendix D)**

Lab – seated **(See course delivery requirements for lab sections, Appendix E)**

### **Annual Orthotic Fitter Course Self Assessment**

Providers of NCOPE approved Orthotic Fitter educational programs are required to submit an annual NCOPE Orthotic Fitter Course self assessment form.

### **Re-approval of NCOPE Orthotic Fitter Course**

Orthotic fitter courses are approved by NCOPE for a term of 3 years. Reapplication is required on a 3 year cycle.

## **NCOPE Required Knowledge & Skill Statements for Approved Orthotic Fitter Courses (Appendix A)**

At the completion of the course students must have knowledge and skill in the following:

### **Anatomy/Physiology**

Knowledge of gross musculoskeletal anatomy relating to upper limb, lower limb and spine including bony landmarks.

Knowledge of gross neuroanatomy (e.g., major peripheral nerves of the upper and lower extremity)

Knowledge of the circulatory system (e.g. structure and function of arterial, venous and lymphatic systems)

Knowledge of planes of motion

Knowledge of basic joint structure and range of motion (ROM)

Knowledge of human development and aging, including pediatric, adult and geriatric, as they relate to prefabricated orthotic care

Knowledge of medical terminology

### **Pathologies**

Knowledge of pathologies including cause and progression (e.g., basic systems pathology of the vascular, neurologic, bone and joint systems) **SEE APPENDIX B LIST OF REQUIRED PATHOLOGIES**

Knowledge of tissue characteristics (e.g., ulcers, pressure sores, lack of sensation)

Knowledge of volumetric changes (e.g., edema, weight gain/loss)

### **Biomechanics**

Knowledge of normal human locomotion

Knowledge of gait deviations

Knowledge of biomechanics (e.g., actions of levers, application of force systems)

### **Patient Assessment**

Knowledge of examination techniques, including gait observation, weight bearing status, skin/tissue evaluation, pain evaluation, and volumetric evaluation

Knowledge of measurement tools and techniques (e.g., tape measurers, ML gauges, goniometers, Brannock device)

Knowledge of the psychology of the disabled

Knowledge of orthotic forms (e.g., assessment, orthometry, measurement, outcomes)

Knowledge of when to refer the patient to other healthcare providers/caregivers

Skill in interpreting referral documents (prescriptions and authorization for service)

Skill in interviewing patients

Skill in communicating with referral sources

Skill in taking patient history and performing physical examination

Skill in patient examination techniques (e.g., measuring ROM, determining muscle strength, body segment alignment)

Skill in interpretation of physical findings (e.g., recognizing skin pressures, dermatological conditions, skeletal deformities)

### **Treatment Plan**

Knowledge of prefabricated orthotic design, fitting criteria of orthoses/compression garments (e.g., anatomical/device relationships, device trimlines) SEE LIST OF REQUIRED DEVICES

Knowledge of care and maintenance of prefabricated orthoses and compression garments

Knowledge of device warranties

Knowledge of available educational and resource materials (e.g. fitting instructions, manufacturer's guidelines)

Skill in managing patients relative to their diagnosis and condition

Skill in measuring for prefabricated orthoses/compression garments including upper limb, lower limb and spinal

Skill in fitting, modifying and adjusting prefabricated orthoses

Skill in determining outcomes as they relate to the treatment goal (e.g., reduction of pain, immobilization, improved gait, improved function).

Skill in evaluating the fit and function of prefabricated orthoses and compression garments

Skill in documentation (e.g., patient records, billing documentation, incident reports)

### **Materials/Equipment/Tools**

Knowledge of material safety procedures and standards (e.g., OSHA, MSDS)

Knowledge of product design, composition and materials

Knowledge of hand and power tools used to fit/adjust/modify prefabricated orthotic devices

Skill in selection of and/or use of materials and components

Skill in use of safety equipment (e.g., personal protective equipment)

Skill in the safe use of hand and power tools used to fit/adjust/modify prefabricated orthotic devices (e.g., bending irons, heat gun, drill, router)

### **Follow-up Plan**

Skill in restoring the optimal fit and function of prefabricated orthoses

Skill in maintenance and repair of prefabricated orthoses and compression garments

Skill in solving patient's problems related to ADLs (e.g., dressing, driving)

### **Practice Management**

Knowledge of referral documents

Knowledge of procedures to record data (e.g., editing of patient records)

Knowledge of policies and procedures regarding privileged information (e.g., HIPAA)

Knowledge of roles and responsibilities associated with other professions

Knowledge of reimbursement protocols (e.g., DMERC, HCFA)

Knowledge of universal precautions including sterile techniques and infection control

Knowledge of scope of practice of the certified orthotic fitter

Knowledge of scope of practice of other orthotic credentials

Knowledge of federal and state rules, regulations, and guidelines (e.g., FDA, ADA, licensure)

## **NCOPE Required Pathologies for Approved Orthotic Fitter Course (APPENDIX B)**

At the completion of the course the student must have a basic knowledge of origin, cause and treatment(s) for the following pathologies. The student must also know the appropriate devices associated with the orthotic management of the pathology.

### **Cervical Spine**

- Whiplash
- Stenosis
- Degenerative disc disease

### **Upper Extremity**

- Clavicle fracture
- Shoulder subluxation
- Lateral and medial epicondylitis
- Tendonitis
- Carpal tunnel syndrome
- De Quervain's Syndrome
- Sprain/strain

### **Thoracic and Lumbar Spine**

- Osteoporosis
- Degenerative joint disease
- Stenosis
- Low back pain
- Herniated disc
- Laminectomy syndrome
- Anterior compression fracture
- Spondylolysis
- Spondylolisthesis
- Geriatric kyphosis

### **Lower Extremity**

#### **General**

- Diabetes mellitus
- Venous insufficiency
- Deep vein thrombosis
- Lymphedema
- Leg length discrepancy

#### **Knee**

- Chondromalacia (Patellofemoral syndrome)
- Patellar subluxation disorder

Osteoarthritis  
Osgood Schlatter's disease  
Anterior cruciate insufficiency  
Posterior cruciate insufficiency  
Medial collateral insufficiency  
Lateral collateral insufficiency  
Meniscus tear  
Sprain/strain

**Ankle/Foot**

Sprain/strain  
Bursitis  
Tendonitis  
Plantar fasciitis  
Heel Spur  
Ulcers  
Posterior tibialis tendon dysfunction  
Peripheral neuropathy  
Achilles tendon rupture  
Midfoot/metatarsal fractures

**NCOPE Required Device List and Recommended Lab Times  
for Approved Orthotic Fitter Course  
(APPENDIX C)**

*The recommended lab times should focus on appropriate selection of orthoses and the adequacy of performance (measurement techniques, fitting parameters and techniques, adjustments and/or modifications to orthoses, fit, etc.).*

**Cervical Spine**

**Lab Time 1 hour**

Soft cervical collar  
Semi-rigid collar

**Upper Extremity**

**Lab Time 1 hour**

Figure 8 splint  
Shoulder immobilizer elastic  
  
Tennis elbow strap  
Elbow sleeve  
  
Wrist splint  
Wrist splint with thumb

**Spinal**

**Lab Time 4 hours**

Thoracolumbar corset  
Anterior frame hyperextension TLSO  
Lumbosacral corset  
Lumbosacral corset with rigid frame/panel  
Semi-rigid LSO  
Semi-rigid TLSO

**Lower Extremity**

**Lab Time 4 hours**

**Knee**

Hinged knee orthosis  
Patellar tendon orthosis  
Elastic knee sleeve  
Knee immobilizer  
Post-op knee orthosis  
Prefabricated functional knee orthosis  
Prefabricated Unloader knee orthosis

**Lower Extremity**

**Lab Time 4 hours**

**Ankle/Foot**

Multiligamentous ankle support  
AFO plastic or other material with ankle joints, prefabricated  
Ankle control orthosis, stirrup style

Pneumatic walker  
Plantar fasciitis night splint  
Pressure relief (heel) AFO  
AFO, plastic or other material, PLS, prefabricated  
Post-op shoe  
Un-loader shoe

**Shoes**

Off-the-shelf depth-inlay shoe

**Gradient Pressure Garments**

**Lab Time 2 hours**

BK 20-30 mmHg stockings  
BK 30-40 mmHg stockings  
AK 20-30 mmHg stockings

# **Orthotic Fitter Distance Learning Education Delivery Guidelines (APPENDIX D)**

## **Course Duration**

Minimum of 16 hours of didactic course content

## **Instructor**

The instructor must hold either a certified orthotist or certified orthotic fitter credential.

## **Didactic Course Content**

Students must have complete exposure to all of the content listed below. At the completion of the course students must have a basic knowledge of these content areas and devices and the appropriate use of the devices as they relate to patient care. The students must have been assessed in their understanding and use of the specific devices as they relate to patient care.

The specific areas are:

Orthotic Fitter Knowledge and Skill statements **(See Appendix A)**  
Required pathologies **(See Appendix B)**  
Required devices **(See Appendix C)**  
Professional ethics **(See ABC Code of Professional Responsibility)**  
Practice management/HIPAA **(See Orthotic Fitter Knowledge and & Skill Statements/Appendix A)**

## **Distance Learning Course Delivery**

Video format with narration, CD, DVD or streaming video with narration  
Non-video format with narration (PowerPoint Keynote)  
Course syllabus must accompany CD,DVD or streaming video  
Multiple formats are recommended (PC, Mac, Linux)

## **Student Support**

Course provider must be able to establish a live capability for real time student interaction (during normal business hours). In addition, the provider must have alternate sources of maintaining student/instructor communication channels. The following are some of the ways that student/instructor interactions may occur:

- Instant messaging
- Texting
- Email
- Conference call
- Web cam

### **Student Assessment Distance Learning**

Student must be assessed to determine if knowledge has been obtained in the areas of orthotic fitter knowledge and skills, required pathologies, required devices, professional ethics and practice management during and at the completion of the course. The intent of the student assessment is to determine that a base set of competencies in all of the defined areas has been obtained.

### **Guidelines for student assessment are:**

- Case studies are encouraged to reinforce treatment concept
- A quiz is to be given for every 4 hours of lecture time.
- A graded quiz is given after 8 hours of lecture time
- Each module (upper extremity, spinal, lower extremity, footwear and gradient pressure garments) shall have a separate student assessment
- A final graded exam is to be administered at the conclusion of the course. No open book tests shall be allowed.
- Student must pass the final exam prior to moving onto the lab portion of the course
- No more than six (6) months can elapse between when the student completes the didactic portion and enters the lab portion of the course

# **NCOPE Guidelines for Approved Orthotic Fitter Course Lab**

## **(APPENDIX E)**

### **Fitting Lab Duration**

Minimum of 16 hours of fitting lab course instruction

### **Instructor**

The instructor must hold either a certified orthotist or certified orthotic fitter credential.

The instructor to student ratio for the lab portion cannot exceed 1 instructor to 10 students.

### **Student Assessment**

Student must be assessed to determine if skill has been obtained in the measurement for, assembly of, demonstration of the proper donning/doffing sequence and the instruction of proper use and care of each of the devices listed in Appendix C.