



## How to Use the Content Outline to Prepare for the Certified Orthotic Fitter (COF) Multiple Choice Certification Examination

The ***Certified Orthotic Fitter Content Outline*** is a schedule of the tasks involved and the domains of the practice of a COF. The Detailed Content Outline (DCO) is derived from a Job Task Analysis, a careful description of the tasks performed by professionals practicing in orthotic fitting. A randomized national survey of those professionals is conducted by BOC every five years to determine what changes, if any, have occurred in the practice. From this survey the DCO is updated and the exam questions revised.

You will have two and a half hours for completion of this segment, consisting of 100 multiple choice questions and 15 unscored pre-test questions. Each question on the exam is based on this outline. In fact, ***none*** of the BOC certification exams can contain any question, case simulation, or demonstration that cannot be directly linked to a specific item in the relevant DCO. Therefore, to prepare to take the exam, we suggest that you study this Outline and especially consider what the underlying knowledge, skills, and abilities you need to be able to serve patients.

The format of the exam is such that it does not follow this outline in order; rather, questions regarding outline sections are placed randomly throughout the exam. In order to understand how to fit a LumboSacral Orthoses for example, one has to comprehend the relevant anatomy, the pathophysiology, the material and engineering sciences, etc.

A fitter must be a complete instrument for patient care, providing maximum benefit, not just fabrication, adjustment or placement. This, then, is the basis for the examinations that test the knowledge, skills, and abilities of a competent fitter. It is not sufficient just to know how to fit a patient with a device – your patient has to be able to benefit from your service. This will not happen until the patient, for example, knows how to don and doff, care for, and in general utilize the orthosis provided. This is why each candidate is required to have a significant period of patient care practice experience to be eligible to take the exam. You won't get all your preparation at one school (e.g. Bauerfeind, Breg, CFS Allied Health, Kassel, O&P Education, Ossur, St. Petersburg College, Viscent, etc.)--you will learn the fundamentals and then sharpen them during patient care practice. To study, review your original training materials. Bring your patient experience into play; it is indispensable.

Now, to the specifics of the COF Detailed Content Outline.

## Performance Levels

There are three Performance Levels, or levels of difficulty, for exam questions: Recall (RE), Application (AP), and Analysis/Evaluation (AN).

**RECALL (RE)** questions require only the recognition of specific factual information, which generally does not vary, relative to the situation. An example is:

Which of the following is **NOT** a type of sander?

- A. belt
- B. palm
- C. band
- D. drum

**APPLICATION (AP)** questions require the comprehension, interpretation or manipulation of concepts or data, in which the response or outcome is situationally dependent, but not overly complex (i.e., application of knowledge which varies based on patient and environmental characteristics). An example is:

To fit a Jewett hyperextension, the fitter needs all of the following measurements **EXCEPT**

- A. hip circumference.
- B. chest circumference.
- C. mandible to sternal notch.
- D. symphysis pubis to sternal notch.

**ANALYSIS/EVALUATION (AN)** questions require integration or synthesis of a variety of concepts or elements to solve a specific problem situation (i.e., evaluating and rendering judgments on complex problems with many situational variables). An example is:

After fitting a patient with an LSO with APL, the fitter should remind the patient to return if there is

1. significant weight gain/loss.
2. any skin irritation.
3. an increase in pain.

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2, and 3

Now, examine the Content Outline. Note the three **bold face numbers on the top right** of the Outline: these indicate the number of questions in each section by performance level. The total number of questions, by performance level is summed at the end of the Content Outline (i.e., 30 RE, 59 AP, 11 AN, total 100 questions). Note the majority of questions (59) are at the Application (AP) level, which is testing your understanding, analysis and management of concepts or data from a patient in a particular situation. Both AP and AN questions require clinical patient care experience.

To understand how to use the Content Outline to anticipate the exam questions, consider the following two examples. Compare Example 1 and 2 below with the Content Outline section 1 and 8. Notice that there is not one reference source encompassing all that is contained in the exam; it is a combination of education, training and experience.

**Example 1:** *Reprinted from COF Content Outline*

	<u>RE</u> 4	<u>AP</u> 6	<u>AN</u> 0
<b>I. FACILITIES MANAGEMENT</b>			
A. Determine Elements of the Fitting Room (e.g., adjustable stool, exam/fitting table, mirror, hard back chair, and parallel bars, or other appropriate ambulating device)			
B. Determine Required Measuring Devices (e.g., tape measures, goniometer, calipers, VAPC caliper, ML gauge, measuring chart, plumb bob, yard/meter stick, Ritz stick, Brannock)			
C. Comply with Environmental Safety Regulations in All Practice Settings (e.g., pathogens, cross-infection, work place hazards)			
D. Assure Quality Care by Development and Maintenance of Policies and Procedures Regarding Patients, Prescribers, Personnel, Maintenance of Records, etc.			
E. Comply with HIPAA regulations			
F. Comply with Accreditation Standards			

**Section 1.** There will be 10 questions on the exam devoted to **Facilities Management**, 4 RE, 6 AP, and 0 AN. To understand this section it may be helpful to download the BOC Facility Accreditation materials, [www.bocusa.org](http://www.bocusa.org) for review of important aspects of facility management.

- You may be asked how to use equipment, measuring devices, or casting equipment (1.B.).
- Knowledge about the fitting room (1.A.) and tools required for proper patient care (1.B.) may be asked.
- Questions are asked regarding technical and clinical elements of the fitting room (1.A.) and safety (1.C.).
- For C, think “OSHA,” work safety, and make sure you are current on those regulations.
- There are also questions throughout the exam relevant to your office professional policies and procedures (1.D.), so review your manuals and records system.
- Questions concerning exposure to pathogens and cross-infection (1.C.) are asked.

**Example 2:** *Reprinted from COF Content Outline*


	<u>RE</u> 4	<u>AP</u> 9	<u>AN</u> 3
<b>VII. EVALUATION/SELECTION of PREFABRICATED (unless specified) PRODUCT/MODEL/TYPE of DEVICE</b>			
A. Cervical/Cervical Thoracic Orthoses (CO, CTO)			
1. Soft foam collars			
2. Semi-rigid (e.g., Philadelphia, Minerva, Aspen, Miami J)			
B. Thoraco-Lumbo-Sacral Orthoses (TLSO)			
1. Rigid (e.g., Taylor, Knight-Taylor, plastic, hyperextension)			
2. Flexible (e.g., with steel stays, thermal molded insert)			
C. Lumbo-Sacral Orthoses (LSO)			


1. Rigid (e.g., chairback, Knight, Harris, Williams flexion, plastic)
2. Flexible (e.g., with steel stays, thermal molded insert)
D. Knee Orthoses (KO)
1. Rigid (e.g., ACL, PCL, MCL, OA, multi-ligamentous, genu recurvatum, dynamic and adjustable R.O.M.)
2. Flexible (e.g., patella-stabilizer, elastic type knee supports with or without inserts/hinges/pads)
E. Ankle Foot Orthoses (AFO) (e.g., plastic, dynamic and adjustable R.O.M., posterior leaf spring, gauntlet, cam walker)
F. Foot Orthoses (FO) – Non-Custom (e.g., arch support, diabetic therapeutic inserts – custom or heat-molded)
G. Shoes - Non-Custom (e.g., therapeutic diabetic shoes, straight/reverse last shoes, extra depth, adjustable)
H. Wrist/Hand/Finger Orthoses (WHFO, WHO, FO) (e.g., dynamic and adjustable R.O.M., positional and functional device, finger splints)
I. Elbow Orthoses (EO) (e.g., dynamic and adjustable R.O.M., functional devices)
J. Shoulder Orthoses (SO) (e.g., abduction, dynamic and adjustable R.O.M., functional devices)
K. Abdominal and Pelvic (e.g., trusses – flexible and rigid, flexible supports, maternity supports)
L. Compression Garments
1. Lymphedema garments
2. Vascular (e.g., elastic stockings and sleeves)


**Section VII. EVALUATION/SELECTION of PREFABRICATED (unless specified) PRODUCT/ MODEL/TYPE of DEVICE** has 16 total questions, 4 RE, 9 AP, and 3 AN questions, regarding products, models, and types of orthoses, which may be placed at random anyplace throughout the exam.


- Questions may be asked regarding any of these orthoses (7. A through L.) relative to the patient and clinical situation, and may be asked in any section of the exam, relative to any professional activity, i.e., ethics, patient communication.
- You need to know the underlying pathology (3.B.), the anatomy (6.A.2.), to explain the objective of each device (4.A.),
  - measuring for each device (1.B., 6.A.),
  - fitting and customizing these devices (5.A.),
- You may be asked for information (5.), on how to:
  - don and doff the device (5.A.),
  - communicate logically (5.)
  - observe patient confidentiality (2.A.).



 www.bocusa.org <b>Certified Orthotic Fitter Detailed Content Outline<sup>i</sup></b>	Cognitive Level			Total
	Recall	Application	Analysis	
<b>1. GENERAL OPERATIONS AND PROFESSIONAL CONDUCT</b>	<b>13</b>	<b>6</b>	<b>0</b>	<b>19</b>
A. Facilities Management	4	2	0	6
1. Determine elements of the fitting room (e.g., stool, exam/fitting table, mirror, hard back chair, ambulating device). 2. Determine required measuring devices (e.g., tape measures, goniometer, calipers, ML gauge, measuring chart, Ritz stick, Brannock). 3. Comply with environmental (Facility/Patient/Employees) safety regulations in all practice settings (e.g., OSHA, pathogens, cross-infection, work place hazards). 4. Assure quality care by development and maintenance of policies and procedures regarding patients, prescribers, personnel, maintenance of records, etc. 5. Comply with HIPAA regulations. 6. Comply with accreditation standards (e.g., CMS supplier and quality standards, BOC Standards).				
B. Perform Professional Practice/Ethics	3	4	0	7
1. Maintain patient confidentiality. 2. Provide training, lectures and information to staff or other health care professionals on current device information. 3. Maintain a quality assurance system that evaluates patient care. 4. Maintain continuing education requirements (e.g., participate in professional and educational symposiums). 5. Comply with BOC Code of Ethics.				
C. Medical Record Documentation	6	0	0	6
1. Verbal / dispensing order <ul style="list-style-type: none"> <li>a. Verify order to patient needs (i.e., consider the pathology of the disease).</li> <li>b. Contact referral source and discuss/revise order if necessary.</li> </ul> 2. Detailed written order <ul style="list-style-type: none"> <li>a. Patient's name</li> <li>b. Detailed description of the device needed</li> <li>c. Start date</li> <li>d. Ordering provider's name and credentials (MD, DO, PA, NP, CRNP)</li> <li>e. NPI</li> </ul>				

 <b>Certified Orthotic Fitter</b> <b>Detailed Content Outline<sup>i</sup></b>	Cognitive Level			Total
	Recall	Application	Analysis	
f. Signature and date 3. Perform final chart audit (i.e., prior to billing).				
<b>2. PATIENT ASSESSMENT/EVALUATION</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>17</b>
A. Establish Relationship with Patient at Patient Intake <ol style="list-style-type: none"> <li>1. Verify required personal information about patient.</li> <li>2. Collect and evaluate patient records.</li> <li>3. Interview patient and obtain history.</li> <li>4. Discuss any related medical treatment(s).</li> <li>5. Discuss financial matters for services/devices with patient.</li> <li>6. Verify medical necessity.</li> </ol> B. Evaluate and Assess Patient <ol style="list-style-type: none"> <li>1. Skin condition</li> <li>2. Range of motion</li> <li>3. Muscle strength</li> <li>4. Manual dexterity</li> <li>5. Coordination</li> <li>6. Posture and gait</li> <li>7. Sensation</li> <li>8. Proprioception</li> <li>9. Edema</li> </ol>				
<b>3. COMMUNICATION/PATIENT EDUCATION</b>	<b>6</b>	<b>10</b>	<b>0</b>	<b>16</b>
A. Explain Purpose/Objective of Device <ol style="list-style-type: none"> <li>1. Describe the measuring and fitting process for the device</li> <li>2. Determine patient's expectations</li> <li>3. Explain benefits and limitations</li> <li>4. Explain patient's role/responsibilities</li> <li>5. Discuss device features</li> <li>6. Obtain patient acknowledgment</li> </ol> B. Anticipate Psychological Impact of Devices on Patient, Family, and Others				
<b>4. DEVICE DELIVERY and APPLICATION</b>	<b>7</b>	<b>8</b>	<b>1</b>	<b>16</b>
A. Finalize Alignment and Fit Device to Patient <ol style="list-style-type: none"> <li>1. Apply device to patient and finalize alignment, adjustment (minimal or substantial), fit, and appearance.</li> </ol>				

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	<b>Recall</b>	<b>Application</b>	<b>Analysis</b>	<b>Total</b>		
2. Demonstrate to patient and/or caregiver proper application and removal, fitting adjustments, and care of device.						
3. Explain how to recognize potential problems (e.g., pressure points, skin breakdown, numbness, contractures). 4. Have patient and/or caregiver demonstrate proper application and removal. 5. Have patient and/or caregiver sign all delivery documentation and acknowledgments (e.g., product delivery tickets, warranties, final foot fitting assessment, instructions, supplier standards). <b>B. Explain Follow-Up Procedures</b> 1. Encourage on-going communication with patient and/or caregiver. 2. Inform patient and/or caregiver of provisions for continued servicing of device (e.g., adjustments, consultation). 3. Provide patient and/or caregiver instructions verbally, in writing, and/or pictorial. 4. Advise patient to contact provider if adverse events occur.						
<b>5. PATIENT PREPARATION/MEASUREMENTS</b>	<b>9</b>	<b>7</b>	<b>0</b>	<b>16</b>		
<b>A. Measure Patient</b> 1. Select appropriate anatomical positioning. 2. Identify anatomical landmarks. 3. Use measuring devices.						
<b>6. EVALUATION/SELECTION of PREFABRICATED PRODUCT/MODEL/TYPE of DEVICE</b>	<b>4</b>	<b>10</b>	<b>2</b>	<b>16</b>		
<b>A. Cervical/Cervical Thoracic Orthoses (CO, CTO)</b> 1. Soft foam collars 2. Semi-rigid (e.g., Philadelphia <sup>®</sup> , Minerva <sup>®</sup> , Aspen <sup>®</sup> , Miami J <sup>®</sup> ) <b>B. Thoraco-Lumbo-Sacral Orthoses (TLSO)</b> 1. TLSO with AP 2. TLSO with APL 3. Hyperextension <b>C. Lumbo-Sacral Orthoses (LSO)</b> 1. LSO with AP 2. LSO with APL						

 <b>Certified Orthotic Fitter Detailed Content Outline<sup>i</sup></b>	Cognitive Level			Total
	Recall	Application	Analysis	
D. Knee Orthoses (KO) <ol style="list-style-type: none"> <li>1. Post-operative (e.g., adjustable R.O.M.)</li> <li>2. Rehabilitative (e.g., patella-stabilizer and/or neoprene type knee supports with inserts/hinges/pads)</li> <li>3. Ligamentous (e.g., ACL, PCL, MCL, LCL, OA)</li> <li>4. Contracture (e.g., static, positional orthosis)</li> </ol>				
E. Ankle Foot Orthoses (AFO) (e.g., static AFO, posterior leaf spring, SAFO, all types of pneumatic or non-pneumatic walkers, carbon fiber type AFO) F. Foot Orthoses (FO) (e.g., arch support) G. Therapeutic shoes and heat moldable inserts H. Wrist/Hand/Finger Orthoses (WHFO, WHO, FO) (e.g., static, dynamic and adjustable R.O.M., positional and functional device, finger splints) I. Elbow Orthoses (EO) (e.g., static, dynamic and adjustable R.O.M., functional devices, positional) J. Shoulder Orthoses (SO) (e.g., dynamic and adjustable R.O.M., abduction, functional devices, shoulder sling/immobilizer) K. Abdominal and Pelvic (e.g., flexible supports, maternity supports)				
<b>TOTALS</b>	<b>42</b>	<b>51</b>	<b>7</b>	<b>100</b>

<sup>i</sup> Each test form will include 2 sets of 15 unscored pretest items in addition to the 100 scored items. 2.5 hours of testing time.  
 BOC approved initial base form passing point by Angoff method in 2017.  
 Future passing points may be established through linear pre-equating.