



## FUNCTIONAL JAW ORTHOPEDICS – ITALIAN / SPANISH COURSE

**Format:** Presence

**Language:** taught in english with italian and spanish translation

## 1. General Information

1.1. Modality:	1.2. Organization form:	1.3. Total duration:	1.4. Schedule:	1.5. Frequency mode and organization:
Continuous training in FJO (other professional training not inserted in the national catalog of qualifications)	In presence, combining theoretical and practical sessions, including live surgery	144 hours (24h per module)	9 a.m. to 6 p.m. (lunch break from 1 pm to 2 pm)	Organized in 6 modules, all compulsory attendance (modular frequency is only allowed for trainees who have already attended the course previously)  One module every two months. Group training.

### 1.6. Context:

Malocclusion is a pathology characterized by causing aesthetic, psychological and functional discomfort to the patient. World Health Organization considers malocclusion the third oral health problem, due to its high prevalence rate.

It is a priority to apply preventive and interceptive malocclusion procedures, giving priority to early treatments through functional orthopedic appliances which have the purpose of correcting the basal structure, to obtain a correct functional balance and using the growth to correct the malocclusion, producing effective clinical results.

Functional Jaw Orthopedics through its principles and characteristics also acts on temporomandibular pain and dysfunction, relieving symptoms and in some cases treating the problem.

## 2. Recipients

2.1. Recipients	2.2. Access requirements	2.3. Vacancies
Dentists	Degree in Dental Medicine	Minimum number: 10 Maximum number: 18

## 3. Training plan (contents, objectives, course load)

### 3.1. Course General objective/ Competences to be acquired

At the end of this full course, trainees will be able to:

- Assume Functional Jaw Orthopedics as a specialty that diagnoses, prevents and treats malocclusions and temporomandibular dysfunction;
- Recognize the importance of treating malocclusions in a multidisciplinary concept;
- Acquire in-depth knowledge to diagnose, prevent and treat malocclusions;
- Apply functional orthopedic techniques and their respective appliances in the treatment of malocclusions;
- Construct functional orthopedic appliances.

### 3.2. Educational Strategic Objective:

At the end of this full course, trainees will be able to:

- Obtain knowledge to diagnose, prevent and treat malocclusions;
- Obtain knowledge that allows to treat temporomandibular pain and dysfunction;
- Apply functional orthopedic techniques and their respective appliances in the treatment of malocclusions;
- Recognize the importance of treating malocclusions in a multidisciplinary concept;
- Correctly identify the principles, characteristics and mechanisms of action of functional appliances;
- Carry out a correct diagnosis of the case through the specific diagnostic methods in Functional Jaw Orthopedics;
- Correctly identify the preventive methods of malocclusion;
- Through the analysis of clinical cases, correctly identify which appliances are indicated for treatment of each type of malocclusion;
- Identify the main appliances used in the treatment of temporomandibular pain and dysfunction;
- Properly prepare a prescription for an appliance;
- Identify correctly, at least 4 professionals involved in the multidisciplinary treatment of malocclusions.

### 3.3. Program Contents (modules, course load, trainers)

Nº	Name module and contents summary	Practical activities to be carried out	Couse load (T and P)
Module 1	<p><b>Functional Jaw Orthopedic Principles, Action Mechanisms and Physiologic Bases. Craniofacial Growth. Neuro-occlusal Rehabilitation Philosophy. Malocclusion Prevention and treatment according FJO.</b></p> <ul style="list-style-type: none"> <li>FJO: Definition, Fundamental Principles and Functional Jaw Orthopaedics Basic Characteristics</li> <li>FJO Physiological bases: Embryology, Osteology, Craniofacial Myology and TMJ</li> <li>Craniofacial Growth Mechanisms</li> <li>FJO Basic Mechanisms of action: Functional Priority Octagon, Muscular Reins Theory, Therapeutic Posture Changing</li> <li>Oral Neurophysiology applied to FJO</li> <li>Neuro-occlusal Rehabilitation concept and physiology.</li> </ul>	<ul style="list-style-type: none"> <li>Planas's functional masticatory angles evaluation</li> <li>Tracing models in the various Therapeutic Posture</li> <li>Clinical cases demonstration</li> </ul>	<p>24h00</p> <p>(T=18h + P= 6h)</p>
Module 2	<p><b>Malocclusion etiology and prevention. Specific radiological diagnosis of Functional Jaw Orthopedics. Functional Orthopaedic Appliances: Indirect Simples Planas Tracks, Indirect Composta Planas Tracks, Indirect Special Tracks. Direct tracks.</b></p> <ul style="list-style-type: none"> <li>Malocclusion etiology and prevention: Levels of prevention in FJO.</li> <li>Panorograma of Simões' Symmetry (Simões' Analysis of Form Deviation).</li> <li>Radiologic Diagnosis: Bimler's Analysis, Lavergne's and Petrovic's Analysis and Rocabado's Analysis.</li> <li>Functional Orthopaedic Appliances: Mechanisms of action, Modus Operandi, Indications and Counter-indications: <ul style="list-style-type: none"> <li>PIPS – Planas Indirect Simple Tracks</li> <li>PIP– Planas Indirect Compound Tracks</li> <li>PIPE – Planas Indirect Special Track</li> </ul> </li> <li>Accessories and modifications.</li> <li>Selective Grinding and Direct Tracks.</li> </ul>	<ul style="list-style-type: none"> <li>Cephalometric Analysis of Bimler, Rocabado; Lavergne and Petrovic.</li> <li>Selective Grinding in plaster models</li> <li>Diagnosis and treatment plan of patients – WSEI protocol.</li> <li>Activation and clinical handling of the Functional Orthopaedic Appliances in clinic.</li> </ul>	<p>24h00</p> <p>(T=8h + P= 16h)</p>
Module 3	<p><b>Functional Orthopaedic Appliances: Simões Network 2,3 and 6. Activation and clinical handling of the Functional Orthopaedic Appliances.</b></p> <ul style="list-style-type: none"> <li>Radiologic Diagnosis: Simões Articular Compass Analysis.</li> <li>Functional Orthopaedic Appliances – Simões Network - Mechanisms of action, Modus Operandi, Indications and Counter-indications: <ul style="list-style-type: none"> <li>SN2, SN3, SN6</li> </ul> </li> <li>Anchorage in the functional orthopaedic appliances</li> </ul>	<ul style="list-style-type: none"> <li>Laboratory – Construction of functional orthopaedic appliances</li> <li>Cephalometric analysis of compass articular by Wilma Simões</li> <li>Activation and clinical handling of the Functional Orthopaedic Appliances in clinic.</li> </ul>	<p>24h00</p> <p>(T=6h + P=18h)</p>
Module 4	<p><b>Functional Orthopaedic Appliances: Simões Network 1,7,8, 9, 10, 11 and 12; Bimler A and C. Activation and clinical handling of the Functional Orthopaedic Appliances.</b></p> <ul style="list-style-type: none"> <li>Functional Orthopaedic Appliances – Simões Network - Mechanisms of action, Modus Operandi, Indications and Counter-indications: <ul style="list-style-type: none"> <li>Bimler A, C</li> </ul> </li> <li>SN1 SN7, SN8, SN9, SN10, SN11, SN12</li> </ul>	<ul style="list-style-type: none"> <li>Laboratory – Construction of functional orthopaedic appliances</li> <li>Activation and clinical handling of the Functional Orthopaedic Appliances.</li> </ul>	<p>24h00</p> <p>(T=8h + P= 16h)</p>
Module 5	<p><b>Treatment of Temporo-mandibular Dysfunctions. Functional Orthopaedic Appliances: Simões Network 20,21,22 and 23. Activation and clinical handling of the Functional Orthopaedic Appliances.</b></p> <ul style="list-style-type: none"> <li>Diagnosis and treatment of Temporomandibular Dysfunctions</li> <li>Temporomandibular dysfunction treatment with functional orthopaedic appliances - Simões Network - Mechanisms of action, Modus Operandi, Indications and Counter-indications: <ul style="list-style-type: none"> <li>SN20 SN21, SN22, SN23</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Imagenology – MRI and Tomograph.</li> <li>Activation and clinical handling of the Functional Orthopaedic Appliances</li> </ul>	<p>24h00</p> <p>(T=8h + P= 16h)</p>
Module 6	<p><b>Seminars in Diagnosis and Treatment Plan for Clinical Cases. Systematic approach of each appliance taught for each type of malocclusion</b></p> <ul style="list-style-type: none"> <li>Therapeutic Synthesis</li> <li>Systematic approach for each malocclusion type: transversal, vertical and sagittal problems.</li> <li>Review of activation and clinical handling of taught OFA</li> </ul>	<ul style="list-style-type: none"> <li>Activation and clinical handling of the Functional Orthopaedic Appliances</li> </ul>	<p>24h00</p> <p>(T=12h + P= 12h)</p>

<ul style="list-style-type: none"><li>• Review of diagnosis and selection of the OFA in different types of malocclusions</li><li>• Presentation and discussion of clinical cases</li></ul>		
--	--	--

## 4. Training development methodologies

Throughout the training sessions, the four pedagogical methods will be combined, using exposure and interrogation for the oral transmission of knowledge (with multimedia supports), so that the knowledge acquired in each module is consolidated. The demonstrative method is widely used not only through videos, real case pictures, thus resorting to technical case studies as well as through the live patient (live surgery) in which the trainees have the opportunity to see live and participate in a controlled and oriented way, acquiring efficiently and effectively the necessary practices.

The active method is favored since the target audience is professionally active and can thus exploit the real experiences of each one, as a way to approach certain contents and practices, promoting a very active participation of everyone. Practical case studies / real clinical case studies, simulated practice as well as the simulation of clinical cases are essential to the complete training of our trainees.

Additionally this course counts on dedicated consulting sessions, according to the practical cases that each trainee will bring along the course, as the learning achievement takes place.

## 5. Evaluation methodologies

### 5.1. Training evaluation

At the end of this full course, trainees will be able to:

- Evaluation of the reaction / satisfaction of the trainees and of the trainer (s) in the development and organization of the training, by completing a Satisfaction Questionnaire at the end of each module;
- Evaluation of the Trainer (s) performance, by the Pedagogical Coordinator, by completing the Trainer Performance Evaluation Questionnaire, as well as by the trainees through the Satisfaction questionnaire;
- Evaluation of the impact of the training through a survey carried out about 6 months after completing the course, accompanying the benefits of the course in the performance of functions, thus seeking to determine the transfer of learning to the real context of work, as well as the effectiveness / impact of training.

### 5.2. Learning evaluation

Each module has an evaluation, carried out according to the following:

#### 5.2.1. Types of evaluation

This course has a formative evaluation, of continuous form throughout the sessions by direct observation and questioning, with the objective of giving feedback, of correcting the techniques, the competences to learn. It also has a summative evaluation, to be carried out at the end of each module through summative tests (written and / or practical).

#### 5.2.2. Evaluation criteria

In the final classification of the course, the following criteria are taken into account:

- Attendance and punctuality– 10%
- Participation and commitment– 25%
- Acquisition and application of skills (average of the tests performed) – 65%

#### 5.2.3. Evaluation Scale

1 - Very Insufficient | 2 – Insufficient | 3 – Sufficient | 4 – Good | 5 – Very Good (if different, update)

#### 5.2.4. Performance

It is considered that the trainee completes the course successfully if he or she obtains a final grade equal to or greater than 3 (three).

## 6. Certificate

### 6.1. Type of document

- The trainees who successfully complete the modules receive a WSEI Certificate, according to the content of the Professional Training Certificate (Decree number 474/2010 of 8 July);
- The trainees, who do not finish successfully, can request to the Pedagogical Coordination a Declaration of Participation, in which the reasons for failing are described.

### 6.2. Conditions for issuing and delivering the certificate

- Certificates will only be issued at the end of the course, according to the educational achievement obtained.
- The certificate will be issued and delivered no later than one month after the end of the course, provided that the following conditions are met:
  - Completion of the modules successfully (only the completed courses are included in the certificate)
  - Compliance with the attendance regime
  - Have paid the contracted amounts referring to the attendance of the training;
- The Certificate is printed on paper, signed and stamped by the Management and can be picked up at our facilities. It may also be sent via Post Office upon request to the pedagogical coordination.

## 7. Attendance

- The trainees must comply with an attendance of 80% of the hours of each course and cumulatively of each module.
- The following are the reasons allowed as justification for absences: sick leave, marriage, and accompaniment of third-parties
- The fault justification process can be done by e-mail or telephone call, being preferred the use of the specific form that should be requested to the pedagogical coordinator.

## 8. Resources and spaces

### 8.1. Human Resources

For the good development of the training sessions, the following are part of the pedagogical team:

- Pedagogical Coordinator: Dr. Sandra Moisés
- Trainer (s) certified by the IEFP (CPC holders) with professional and pedagogical experience
  - Dr. Carina Esperancinha
  - Dr. Wilma Simões
  - Dr. Mercedes Galvez
  - Dr. Delfino Allais
- Administrative support

### 8.2. Teaching resources, materials and facilities

For the good development of the training sessions, the following spaces and resources are assured:

- Theoretical training room with an area of 48m<sup>2</sup> (but with capacity for practical activities for example to work in casts) with the following characteristics and equipment:
  - Tables and chairs of high quality and comfort with capacity for 18 trainees, with 2.5 m<sup>2</sup> per trainee;
  - Desk of the trainer composed of table and chair and also a platform with an incorporated computer;
  - The trainer's desk is also equipped with a Camcorder;
  - White board and flipchart;
  - 1 LED screen of 84 inches with 4 inputs (projection / playback presentations, videos, live surgery images etc);
  - 2 LED screens of 55 inches each (projection / playback presentations, videos, live surgery images etc);
- Practical training room / Medical cabinet with 16.66 m<sup>2</sup> with the application of the "live surgery" method, allowing the trainees to attend live intervention in real cases and to practice:
  - Medical cabinet with a stomatology chair, 2 cameras in the ceiling with great zoom and sharpness capability and a ceiling microphone;
  - 2 wireless headset microphones with sound system in the auditorium and in the medical cabinet.
  - Intraoral and extra-oral cameras in the stomatology chair.
- Appliances construction laboratory with 21.57m<sup>2</sup>, equipped with furniture and all the equipment needed to construct the appliances, with direct communication to the theoretical training room,
- Other equipment:
  - Multicam System
  - Canon Professional Camera
  - Consumable materials (gloves, bibs, cups, medical tweezers, etc.)
- All training spaces have: excellent lighting conditions (natural and artificial light), thermal and acoustic comfort, compliance with safety and hygiene rules;
- Access to WC without gender differentiation; access for people with reduced mobility;
- All trainees have access to the pedagogical documentation used during the training, namely manuals and / or presentations, made available digitally in the personal area of each trainee in the training management platform.