



**REPUBLIC OF CUBA  
MINISTRY OF PUBLIC HEALTH**

**NATIONAL DIRECTORATE OF MEDICAL TEACHING  
UNIVERSITY OF MEDICAL SCIENCES OF HAVANA**

**SUMMARY**

**ACADEMIC PROGRAM  
SPECIALTY OF MAXILLO FACIAL SURGERY**

**2007**



## GENERAL INFORMATION

- **Specialty Name:** Maxillo Facial Surgery
- **Academic degree:** First Degree Specialist
- **Institutions responsible for the program:**
  - National Directorate of Medical Teaching of the Ministry of Public Health.
  - University of Medical Sciences of Havana.
- **Educational Level:** Postgraduate.
- **Type of Specialty:** Stomatological
- **Programme Duration:** 3 years.
- **Type of Program:** modular, full time, training in-services.
- **Total academic hours:** 5363
- **Place of training:** services of clinical, pediatric, university polyclinics and other institutions that meet the requirements established in the Teaching Accreditation System of the MINSAP for postgraduate teaching activities.
- **Entry requirement:** To be a graduate of the Dentist career and to be in the full exercise of the profession.



## INTRODUCTION

The specialty of Maxillofacial Surgery is the branch of Dentistry that deals with the prevention, study, diagnosis, treatment and rehabilitation of diseases and injuries of the oral cavity and face as well as cervical structures, directly or indirectly related with them.

The training program in the Specialty of Maxillofacial Surgery responds to a specialist model that synthesizes the characteristics of the profession, in a temporary setting and location, and is expressed in the professional's profile.

Aspects related to the characterization and profile of the graduate are complemented, essential to have well defined the final measurable objective for the evaluation of the competence and performance of the specialist.

The professional profile constitutes a system that defines the functional duties and modes of action of the specialist with regard to comprehensive and specialized dental care, management, teaching and research.

This improvement and updating preserves all the positive of the previous programs, taking into account the rich experience in its implementation over several years, since 1969 when the first specialty program was implemented. In addition, the advances made in the development of science, technology and contemporary social demands in this area of knowledge are incorporated.

The program contains the guidelines for the teaching organization of each academic year, is structured in a modular way and by stays and reflects the result of the improvement and updating of the current official program issued in the 1985 academic year.

Advances in antimicrobial therapy, implantology, orthognathic surgery, and vascular microsurgery are incorporated into the program. It deepens in the attention to the polytraumatized and in the aspects related to the contributions of other sciences and specialties.

Its conformation and design allow the necessary flexibility for its development in any teaching accredited unit and the consequent updating, which in a systematic way, every program that intends to maintain its validity must be subject to.

In addition, it encourages and promotes the application of advances in pedagogical science in the teaching-learning process and of modern computer science and cybernetics techniques.

This model of specialist training is based on the pedagogical postulates of the historical-cultural approach, which gives the teaching objective a guiding character, a starting

point to structure and develop the rest of the didactic categories and on the vast experience of medical teaching Cuban superior.

## **ENTRY REQUIREMENTS**

General: Those established in the Regulations of the Residence Regime.

## **MODEL OF THE SPECIALIST IN MAXILLO FACIAL SURGERY**

The specialist's model is given by the characterization of the graduate and the professional profile.

## **CHARACTERIZATION OF THE GRADUATE**

The first degree specialist in Maxillofacial Surgery must have a solid professional training that allows him to know, assess and transform the health status of the patient who is a candidate for care for this specialty, with a scientific approach to the health-disease process and its nature bio-psycho-social.

His performance must be supported in high principles such as revolutionary and internationalist, philosophical and ethical human values with sensitivity, moral dedication, altruism and social responsibility.

They must be creative and possess manual skills that allow him to work with caution, prudence, capacity for quick analysis, equanimity, observance, perseverance and security in decision-making.

Always act for the benefit of the patient, her people and humanity, respecting the interests of the patient at all times.

They will maintain modest, simple and patient communication with family members, providing emotional support and educated consent, for which it will be necessary to assimilate his criteria for a shared decision, taking into account their beliefs, customs and values.

They will possess a high concept of medical professionalism, solid knowledge, high scientific level and constant concern for raising his general culture.

They will be able to learn by yourself actively and permanently during your professional life, developing skills to obtain information from different sources, objective observation, logical reasoning and critical judgment when studying and evaluating professional and social reality, when same as available literature and information.

He will be prepared to link his professional activity with teaching, research and management activities that respond to the needs of society; with organization, responsibility and discipline in the performance of tasks.

He will consider the cost-benefit ratio by opting for the lowest-cost alternative on equal terms.

He will be able to work in a team and interact with other professionals and specialists, contributing the strength of the specialty, expressed in its comprehensive, generalizing, and integrating capacity in the assessment and transformation of the child's health in its natural and social context.

He will creatively apply the basic elements about Informatics, Automation, Statistics and Clinical Epidemiology.

You will be honest and responsible in ensuring the correct issuance of legal medical documents.

## **PROFESSIONAL PROFILE**

### **Medical care function:**

Provide care to the patient who is a candidate for this specialty and establish behaviors in relation to oral-maxillofacial diseases.

Apply the clinical method with full mastery of its methodological, theoretical, scientific foundations and the interaction of the elements that compose them.

Issue total diagnostic judgments, considering the patient as an indivisible unit and in interaction with the environment and integral to it, taking into account the biological and psychological aspects.

Indicate and interpret diagnostic investigations in relation to the level of development of the health unit where he exercises his profession.

Indicate, guide or carry out both preventive and curative measures and rehabilitation and evaluate their results.

Make prognostic and evolutionary judgments and provide psychological support to the patient and her family.

Establish criteria for admission, consultation, discharge, referral or follow-up, when necessary.

Manage diagnostic and therapeutic teams and interpret their results.

Apply methods of Maxillofacial Surgery.

Carry out the pre and post operative care of the patient demanding maxillofacial surgery.

Participate in collective institutional work with multidisciplinary health teams.



Carry out duty on call of the specialty.

Maintain a close relationship with primary health care through the basic work group and the family stomatologist.

**Management Function:**

To interpret and evaluate the quality indicators of the Oral Cancer Detection Program, in order to determine the factors and circumstances that modify them in order to take adequate measures for their control.

To prepare a comprehensive work plans according to available resources, in order to comply with the plans established by the National Health System, for patient care in their healing, rehabilitation and preservation of health.

To control and evaluate the activities of a Maxillofacial Surgery service.

Requiring strict compliance with the hygienic-epidemiological standards of the service.

To participate in the functioning of the hospital scientific committees.

Management of regime of use of the equipment they use, demanding compliance with it and the performance of the planned scheduled maintenance.

To apply knowledge of the basic components for management work in Public Health.

**Teaching function:**

Execute educational functions in relation to the elements of the specialty, acting on patients and relatives, students, technicians, professionals, and other workers of the institution.

Plan, organize and control the teaching-learning process of students, technicians, nursing staff and other health professionals, in which they will use the methods and means according to the objectives to be achieved and the contents to be taught.

Identify the learning needs of the specialty, which promote permanent education of professionals and technicians who work in the services of Maxillofacial Surgery.

**Research function:**

Apply the method of scientific research with domains of its theoretical and methodological foundations in solving problems that contribute to the increase in knowledge and development of Public Health.

Design scientific research projects in accordance with current regulations.

Carry out scientific research related to their professional profile individually and in multidisciplinary groups, disseminating their results.



Systematically review the scientific literature, critically analyzing its validity and application.

Present and defend scientific works in accordance with the level of development reached and make objective and critical judgments about the scientific works reviewed.

## **CURRICULUM**

### **TOPICS**

#### **MEDICAL CARE FUNCTION**

##### **Area I: Basic Medicine**

- Module 1. Conditions of the Respiratory System
- Module 2. Conditions of the Cardiovascular System
- Module 3. Digestive System Conditions
- Module 4. Conditions of the Haemolymphopoietic System
- Module 5. Diseases of the Endocrine and metabolic System
- Module 6. Diseases of the Urogenital System
- Module 7. Nervous System Conditions
- Module 8. Infectious Diseases
- Module 9. Shock
- Module 10. Legal Medicine

##### **Area II: Generalities in Maxillofacial Surgery**

- Module 11. Basic Principles in Oral Surgery
- Module 12. Local and General Anesthesia
- Module 13. Surgical Risk
- Module 14. Pre and Postoperative
- Module 15. Surgical Anatomy of the Head and Neck
- Module 16. Odontogenic and Non-Odontogenic Septic Processes

##### **Area III: Maxillofacial Traumatology**

- Module 17. Comprehensive Care for the Polytraumatized
- Module 18. Basic Attention in Maxillofacial Trauma
- Module 19. Fractures of the Middle and Upper Third of the Face
- Module 20. Lower Third Face Fractures
- Module 21. Complex Fractures
- Module 22. Residual Deformities
- Module 23. Firearm Injuries

##### **Area IV: Oral Surgery**

- Module 24. Complications of Tooth Extraction
- Module 25. Retained Teeth
- Module 26. Preprosthetic Surgery
- Module 27. Periapical Surgery

#### **Area V: Maxillofacial Pathology**

- Module 28. Benign Cervico Facial Pathology
- Module 29. Benign Pathology of the Salivary Glands
- Module 30. Neurological Disorders of the Jaws
- Module 31. TMJ Disorders
- Module 32. Oral Manifestations of Systemic Diseases

#### **Area VI: Oncological Maxillofacial Surgery**

- Module 33. Premalignant Lesions of the Oral Cavity
- Module 34. Malignant Pathology of the Salivary Glands
- Module 35. Oral Cancer
- Module 36. Malignant Cervico Facial Pathology

#### **Area VII: Orthognathic Surgery**

- Module 37. Orthognathic Surgery

#### **Area VIII: Vascular Microsurgery**

- Module 38. Basic Fundamentals in Vascular Microsurgery

#### **Area IX: Pediatric Maxillofacial Surgery**

- Module 39. Comprehensive Management of the Pediatric Patient
- Module 40. Traumatology in the Pediatric Patient
- Module 41. Congenital Malformations of Attention in Maxillofacial Surgery

#### **INVESTIGATIVE FUNCTION**

- Module 42. Research

#### **MANAGEMENT FUNCTION**

- Module 43. Management in hospitals

#### **TEACHING FUNCTION**

- Module 44. Teaching-Learning Process.





## GENERAL SCHEDULE BY YEARS

First Year	Second Year	Third Year
<p><b>Area I: Basic Medicine</b> Module 1 - 10</p> <p><b>Area II: Generalities in Maxillofacial Surgery</b> Module 11 - 16</p> <p><b>Area III: Maxillofacial Traumatology</b> Module 17 - 18</p> <p><b>Area IV: Oral Surgery</b> Module 24 - 27</p>	<p><b>Area III: Maxillofacial Traumatology</b> Module 19 - 23</p> <p><b>Area V: Maxillofacial Pathology</b> Module 28, 30, 31</p>	<p><b>Area V: Maxillofacial Pathology</b> Module 29 and 32</p> <p><b>Area VI: Oncological Maxillofacial Surgery</b> Module 33 - 36</p> <p><b>Area VII: Orthognathic Surgery</b> Module 37</p> <p><b>Area VIII: Vascular Microsurgery</b> Module 38</p> <p><b>Area IX: Pediatric Maxillofacial Surgery</b> Module 39 - 41</p>
Module 42. Research		
Module 43. Management		
Module 44. Teaching-Learning Process		



## DISTRIBUTION OF HOURS BY MODULES

Module	No	Theoretical activities hours	Self-work or practical hours	Total hours
Module	1	60	20	80
Module	2	60	20	80
Module	3	60	20	80
Module	4	60	20	80
Module	5	40	13	53
Module	6	40	13	53
Module	7	40	13	53
Module	8	40	13	53
Module	9	60	20	80
Module	10	60	20	80
Module	11	120	40	160
Module	12	40	13	53
Module	13	60	20	80
Module	14	40	13	53
Module	15	120	40	160
Module	16	120	40	160
Module	17	120	40	160
Module	18	40	13	53
Module	24	40	13	53
Module	25	40	13	53
Module	26	40	13	53
Module	27	40	13	53
<b>I YEAR</b>	<b>Total</b>	<b>1340</b>	<b>447</b>	<b>1787</b>
Module	19	120	40	160
Module	20	120	40	160
Module	21	120	40	160
Module	22	120	40	160
Module	23	120	40	160
Module	28	240	80	320
Module	30	240	80	320
Module	31	240	80	320
<b>II YEAR</b>	<b>Total</b>	<b>1320</b>	<b>440</b>	<b>1760</b>
Module	29	<b>60</b>	20	80
Module	32	<b>120</b>	40	160
Module	33	<b>120</b>	40	160
Module	34	<b>120</b>	40	160
Module	35	<b>120</b>	40	160
Module	36	<b>120</b>	40	160
Module	37	<b>120</b>	40	160
Module	38	<b>120</b>	40	160
Module	39	<b>120</b>	40	160

Module	40	<b>120</b>	40	160
Module	41	<b>120</b>	40	160
<b>III YEAR</b>		<b>1260</b>	<b>420</b>	<b>1680</b>
Module	42	40	13	53
Module	43	22	7	29
Module	44	40	13	53
	<b>GRAND TOTAL</b>	<b>4022</b>	<b>1341</b>	<b>5363</b>

### MAJOR SKILLS AND COMPETENCES:

- Provide care to the patient who is a candidate for this specialty and establish behaviors in relation to oral-maxillofacial diseases.
- Apply the clinical method with full mastery of its methodological, theoretical, scientific foundations and the interaction of the elements that compose them.
- Issue total diagnostic judgments, considering the patient as an indivisible unit and in interaction with the environment and integral to it, taking into account the biological and psychological aspects.
- Indicate and interpret diagnostic investigations in relation to the level of development of the health unit where they practice their profession.
- Indicate, guide or carry out both preventive and curative measures and rehabilitation and evaluate their results.
- Make prognostic and evolutionary judgments and provide psychological support to the patient and her family.
- Establish criteria for admission, consultation, discharge, referral or follow-up when necessary.
- Manage diagnostic and therapeutic teams and interpret their results.
- Apply methods of Maxillofacial Surgery.
- Carry out the pre and post operative care of the patient demanding maxillofacial surgery.
- Participate in collective institutional work with multidisciplinary health teams.
- Carry out on duty and on call of the specialty.
- Maintain a close relationship with primary health care through the basic work group and the family stomatologist.



## TEACHING STRATEGY

The Academic Plan is designed for a period of three years. The contents are organized into nine areas of knowledge, which contribute to the performance of care, research, teaching and management functions. These areas are made up of modules that integrate the knowledge of Maxillofacial Surgery and other branches of knowledge, which gain in complexity and integration to the extent that the solution of health problems requires it.

The strategy consists of developing knowledge and skills, in increasing complexity, taking into account the fulfillment of the proposed objectives and the didactic principles of the specialty.

The specialist training process is carried out in the Maxillofacial Surgery services of Institutes, Specialized Hospitals, Surgical, Pediatric, General and Stomatological Clinics duly accredited, the resident joining a work team led by a tutor professor.

As a fundamental form of teaching, education at work will be used, in which medical care, management, teaching-educational and research activities will be integrated, typical of the year in question and in accordance with the rate of acquisition of the knowledge and the development of assimilated skills. The main teaching-care forms that must be assumed are: Visit, guard and delivery of guard, case discussion, surgical, clinical radiological, clinical pathological activity, among others.

Academic activities must be oriented to the ways in which the resident's capacity for independence and participation is developed as the main subject of the teaching-learning process; Therefore, the following are suggested: Bibliographic reviews, seminars and workshops.



The resident will join the compliance of the medical guard, according to the provisions of the Regulations of the Residency Regime, which is valid for the entire training time.

The teachers-tutors of the different accredited teaching units are institutionally in charge of developing this program with responsibility and creativity, which has a state and national character.

### First year

During this period, the resident must acquire general knowledge and skills related to Basic Medicine, Maxillofacial Surgery, Comprehensive Trauma Management and Oral Surgery.

In order to acquire the knowledge and skills of Areas I, the resident will complete a stay in the Internal Medicine Service of their base Hospital with academic activities that pay tribute to modules 1 to 10, with a duration of 6 months.

The knowledge and skills corresponding to Area II will be developed for 1 month with a stay in the Maxillofacial Surgery Service of its base Hospital with academic activities that pay tribute to modules 11 to 16.

For the acquisition of the knowledge of Areas III, the academic activities that pay tribute to modules 17 and 18 will be carried out, with a duration of 2 months, while the resident will remain in the Maxillofacial Surgery Service of his base Hospital. The corresponding skills will be acquired with the incorporation to the medical guard in services of attention to the polytraumatized.

The knowledge and skills corresponding to Area IV of Oral Surgery will be developed during 2 months with a stay in the Maxillofacial Surgery Service of its base Hospital with academic activities that contribute to modules from 24 to 27. The knowledge and skills corresponding to this area they continue to deepen throughout the time of residence and their performance as a specialist.

#### Second year

In this course the resident must deepen and incorporate knowledge and skills of Area III corresponding to Maxillofacial Trauma. He will delve into the study of new knowledge and skills of Area V corresponding to Maxillofacial Pathology.

To acquire the knowledge and skills of Area III, the resident will complete a stay in a Maxillofacial Surgery Service that provides attention to maxillofacial trauma with academic activities that pay tribute to modules from 19 to 23, with a duration of 6 months

The knowledge and skills corresponding to Area V corresponding to Maxillofacial Pathology will be developed for 5 months with a stay in the Maxillofacial Surgery Service of its base Hospital with academic activities that pay tribute to modules from 28 to 31. The corresponding knowledge and skills They continue to deepen this area throughout their residence time and their performance as a specialist.

#### Third year

In this course the resident must deepen and incorporate knowledge and skills of Area V corresponding to Maxillofacial Pathology. It will incorporate new knowledge and skills from Oncological Maxillofacial Surgery, Orthognathic Surgery, Vascular Microsurgery and Pediatric Maxillofacial Surgery corresponding to Areas VI, VII, VIII, and IX.

To complete the knowledge and skills of Areas V, academic activities that pay tribute to modules 29 and 32 will be carried out.



Area VI corresponding to Oncological Maxillofacial Surgery will be developed for 3 months in Head and Neck Oncological Surgery Services of Institutes, Specialized Hospitals, Surgical Clinic or General duly accredited, with academic activities that pay tribute to modules 33 to 36.

Area VII corresponding to Orthognathic Surgery will be developed for 4 months in Orthognathic Surgery Services of Institutes, Specialized Hospitals, Surgical Clinic or General duly accredited, with academic activities that pay to module 37.

To complete the knowledge and skills of Areas VIII, academic activities that pay tribute to Module 38 will be carried out.

In order to acquire the knowledge and skills of Area IX of Pediatric Maxillofacial Surgery, the resident will complete a stay in a Pediatric Maxillofacial Surgery Service with academic activities that pay tribute to modules 39 to 41, with a duration of 3 months.

In addition, modules 42 to 44 for the knowledge and skills of Research, Management and Teaching will expire, without order of precedence and at any time during the residency.

Module 42 corresponding to Research will be fulfilled with the development of the Research Methodology course and the fulfillment of investigative tasks that pay the schedule established for the delivery of the TTE, participation in research work, presentation and defense of work in scientific events .

It is an essential requirement that during the first year the resident selects the topic and elaborates the protocol of his TTE, which must be approved in a departmental scientific session and later by the Scientific Council of the hospital.

It is also an essential requirement that during the period following the first year the resident develops the subject and prepares the final report of his TTE, which must be defended in the State Exam.

For the development of the TTE, the resident will have 4 hours per week during the entire time of academic residency.

Module 43 corresponding to Management will be fulfilled with the development of management tasks assigned each year, related to the organization of services.

Module 44 is developed, with the fulfillment of teaching tasks, in which they will carry out activities with undergraduate students of the different related careers and residents of lower years, under the advice of a Professor and educational activities with patients and relatives, playing a fundamental role is the demand and exemplary nature of the resident.



## EVALUATION SYSTEM

- **FORMATIVE EVALUATION:** monthly evaluation, registered on the resident's evaluation card, in accordance with the provisions of the program. It includes the results of teaching activities, assistance, and participation in courses, case discussions and rotations planned in the Program.
- **PROMOTION EVALUATION:** at the end of each academic period of residence (1 year). It has two components evaluated by Academic Panel appointed by the Rector of the University:
  - Practical exercise.
  - Theoretical exercise.

Requirements: To qualify for this exam, the resident must have complied with the schedule of the investigative protocol called the Research Work of Completion of the Specialty (TTE), as endorsed by the tutors.

Score distribution for the year promotion evaluation:

- Course evaluation: 30 points (minimum 21 points)
- Theoretical exam: 30 points (minimum 21 points)
- Practical exam: 30 points (minimum 21 points)
- TTE: 10 points (minimum 7 points)

To be considered approved, with 70% of the points of each year.

- **EVALUATION OF GRADUATION:** It is done at the end of the 3 years of residence. It has three components evaluated by Academic Panel appointed by the Rector of the University on behalf of the State:
  - Research Work of Completion of the Specialty (TTE) presentation and defense.
  - Practical examination.
  - Theoretical Examination



**CERTIFY**

The undersigned, Suiberto Hechavarría Toledo, MD, MSc, Head of the Cuban Medical Mission in the Kingdom of Saudi Arabia, attached to the Embassy of the Republic of Cuba in Riyadh, in the name and representation of of the Ministry Of Health of The Reupblic of Cuba I certify that the document MAXILLOFACIAL SURGERY SPECIALTY ACADEMIC PROGRAM, is authentic and officially approved by the Ministry of Public Health of Cuba.

If you require any additional information, please feel free to contact me at phone (+966) 55558773534, e-mail [suiberto.h@gmail.com](mailto:suiberto.h@gmail.com) and [stoledo@moh.gov.sa](mailto:stoledo@moh.gov.sa)

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signature

