

COURSE 2023-2024

International Master's Degree in Oral Surgery (IMOS)



International Master's Degree in Oral Surgery (IMOS) 2023-2026

Introduction

IMOS is a full-time program in oral surgery and implantology. It consists of 3 academic years with theoretical and practical training. During this program, students will acquire advanced knowledge of oral and maxillofacial surgery, which will allow them to treat complex cases safely. The most important block of training will be devoted to implant dentistry, with an emphasis on the diagnosis and treatment planning of advanced and complex cases. Residents will also acquire extensive knowledge of oral rehabilitation and prosthodontics, working with patients from diagnosis and surgery to delivery of the provisional and definitive prosthesis. A fully digital workflow will be encouraged at all stages. Diagnosis and planning is carried out in modern facilities that have state-of-the-art intraoral scanners and three CBCTs to perform the best possible treatments.

A multidisciplinary approach will always be sought, which will favor interaction with other departments such as restorative, endodontics, periodontology and orthodontics. Students will also acquire knowledge of cardiopulmonary resuscitation, sedation and conscious sedation with specific training and will work in a hospital environment with patients under sedation or general anesthesia.

Active participation in courses and congresses will also be an important task for IMOS residents.

Finally, another important aspect of this program is the training in pre-clinical and clinical research, through the many research projects that are generated year after year and that many times end up being published in high-impact journals.

Organising Department

Department of Oral and Maxillofacial Surgery
Faculty of Dentistry

Chairman

Dr Federico Hernández Alfaro

Programme Directors

Dr Samir Aboul-Hosn
Dr Pablo Altuna

Coordinators

Dr Jorge Bertos Quilez
Dr Susana García

Academic Board

Dr Samir Aboul-Hosn, Dr Pablo Altuna, Dr María Luisa Augé, Dr Sandra Barrio, Dr Albert Barroso, Dr Jorge Bertos, Dr Fernando De La Iglesia, Dr Daniel De Ribot, Dr Basel Elnayef, Dr Noelia Fleischmacher, Dr Andrea Galve, Dr Berta García, Dr Oriol Cantó, Dr Jordi Gargallo, Dr Federico Hernández Alfaro, Dr Susana García, Dr Jordi Gargallo Albiol, Dr Maria Giral, Dr Aida Lázaro, Dr Gina Lloret, Dr Naroa Lozano, Dr Ernest Lucas, Dr Jordi Marqués, Dr Jordi Masià, Dr Raul Medina, Dr Javier Molina, Dr Sara Neves, Dr Jorge Ortega, Dr Octavi Ortiz, Dr Antoni Parada, Dr Anna M. Parellada, Dr Hector Parellada, Dr Silvia Pérez, Dr Ana Poveda, Dr Manuel Piñera, Dr Cristina Porta, Dr Marc Quevedo, Dr Gian Maria Ragucci, Dr Guillermo Rocafort, Dr Vanessa Ruiz, Dr Oscar Salomó, Dr Joan Soliva, Dr Oriol Torres, Dr Marta Tresserra, Dr Adaia Valls, Dr Juan Zanón, Dr Daniel Paternostro, Dr Cristina Vallés.

Academic Board Cross-Disciplinary Subjects:

Dr Angela Donate, Dr Rut Fadó, Dr Victor Gil, Dr Adrian Gonzalez, Dr Josep M^a Huguet, Dr Javier Mareque, Dr Jordi Mas, Dr Angela Mayoral, Dr Andres Pascual La Rocca, Dr Mariana Ponte.

Guest Faculty (online or on-site)

Dr Luca de Stavola (Italia), Dr Germán Barbieri (Coruña, España), Dr Fernando Cebrián (Madrid, España), Dr Paulo Carvalho (Portugal), Dr Joao Fonseca (Portugal), Dr Joao Carames (Universidad de Lisboa), Dr Andrea Chierico (Verona), Dr David Peñarrocha (Universidad de Valencia), Dr Patricia Solano (Universidad de Sevilla).

Guest Faculty (UIC)

Dr Jesús Muñoz Peñalver, Dr Lucas Queiroz

Course Programme

The programme of the International Master's Degree in Oral Surgery is divided in three parts: theoretical, practical and research.

The theoretical programme is organised into cross-disciplinary subjects; oral and maxillofacial medical and surgical seminars, literature review sessions, clinical sessions, periodontal surgical seminars and invited lectures and sessions.

Theoretical programme

Oral Surgery and Maxillofacial Basics

Introduction to oral and maxillofacial surgical pathology.

Medical history in oral surgery.

Preoperative studies.

Local anaesthesia, sedation and general anaesthesia.

Disinfection and sterilisation.

Surgical field preparation.

Instruments and materials in oral surgery.

Postoperative care and medication.

Basic surgical technique: Incisions and flaps.

Dental Eruption Alterations: Complex Dental Extractions

Introduction to eruption alterations.

Third molar eruption pathology.

Canine eruption pathology.

Other dental inclusions.

Supernumerary teeth.

Complex dental extractions.

Dental extraction complications.

Infection Pathology

Focal infections.

Systemic infections: Local infections.

Soft Tissue Pathology

Oral mucosa pathologies: Classification, diagnosis and treatment.

Soft tissue surgery.

Biopsy.

Buccal frenulum surgery.

Cyst and Tumour Pathology

Maxillary cysts: Classification, diagnosis and treatment.

Periapical surgery.

Benign tumours of the oral cavity.

Malignant tumours of the oral cavity.

Squamous carcinoma of the oral cavity and pharynx.

Oral surgery in the irradiated patient.

Endodontic Essentials

Pulp anatomy and physiopathology.

Endodontic treatment basics.

Endodontic treatment in necrotic teeth.

Endodontic treatment in periapical lesions.

Endodontic treatment planning. Case discussion.

Dental Implants

Introduction and principles of dental implants.

Dental implant surface, design and biomechanics, bone anatomy and histology.

Osseointegration: Image diagnosis in dental implantology.

Surgical technique in dental implants.

Oral pathology and dental implants in paediatric patients.

Guided surgery.

Guided bone regeneration.

Bone regeneration with extraoral autogenous grafts.

Dental implants and bisphosphonates.

Short implants.

Post extraction implants.

Maxillary sinus lift: Lateral and crestal approach, split crest technique in horizontal bone atrophy.

Dental implants in anatomic arbotants: Zygomatic implants and pterygoid implants.

Dental implant complications.

New paradigms in reconstructive and pre-prosthetic surgery.

Salivary Glands Pathology, Buccofacial traumatology and cranio-facial development pathology.

Diagnostic and therapeutic basic concepts.

Practical Programme

Our learning model is based on ensuring our students can achieve a high academic level. Therefore, clinical practice with patients is essential to gain a high level of expertise. What makes our Postgraduate courses stand out is the Clinical Practice with Patients. Surgical Clinical Practice in the CUO (University Dental Clinic) Prosthodontic Clinical Practice in the CUO (University Dental Clinic) our prosthodontics laboratory, hospital practice, and placements in other Universities are other advantages we offer.

The practical programme includes activities in the Oral Surgery Department, Prosthodontics Department and Periodontic Department in the University Clinic, as well prosthodontic laboratory work on Monday afternoons. Finally, internships will take place in one medical centre outside the university, on Mondays and Tuesdays mornings and afternoons, during the first, second and third year of the master's degree. Due to the work UIC Barcelona undertakes with European and American universities, second and third year students will have the opportunity to visit other departments in national and international universities.

Practical surgical activities in the university clinic will take place on Tuesdays, Wednesdays and Thursday afternoons, throughout the programme. Postgraduate students will perform all oral surgical treatments and surgical implant treatments under the supervision of a professor/lecturer. Initially, during the first year of the programme the student will assist second and third year students. Later on, they will start performing easy surgical interventions, with help from a more experienced student and always under the supervision of a professor/lecturer. Depending on the individual evolutions of each student's learning curve, they will be allowed to treat more advanced cases or not.

Prosthodontic practice will be carried out on Friday mornings during the third year of the programme, for pre-surgical planning in all implant cases and this way students will achieve a good knowledge of prosthodontic rehabilitation in dental implant treatments.

The prosthodontic laboratory: during the first year of the programme, students will go to the lab on Monday afternoons to learn the basic procedure for creating the implant retained denture.

Stays in other universities

During the second and third year of the programme, those students considered to be the best, based on strict criteria, will be offered a placement in the Oral Surgery Department of a national or international University.

Courses and conferences

Students must attend and present in at least three congresses over the 3-year master's programme: SECIB, SECOM, SEPA, SEPES.

During the Master's programme, students must also present an oral communication at one of the following international conferences: EAO, Europerio, Osteology, EFOSS or SECOM.

Anaesthesia Seminar on Managing Patients with Special Needs

Organised by the Anaesthesia Department in the General Hospital of Catalonia. Dr Pilar Mula, a physician specialising in Anesthesiology and Recovery, will be responsible for this seminar that will take place during the session on Clinical Internships in Surgical Techniques, a basic Cardiopulmonary Resuscitation (CPR) seminar.

Dr Pilar Mula will take part as lead professor and will receive assistance from Clinical Internships in Surgical Techniques staff.

CPR Course

Cardiovascular diseases are a major public health problem. Most unnecessary deaths are caused by coronary diseases and often happen in out-of-hospital settings. For this reason providing training to the general population is encouraged, not only people directly related to the healthcare field, since they can play a crucial role as primary healthcare assistants. The training programme will be given by an instructor from the Catalan Resuscitation Council (CCR) and will include the content stipulated for official BLS-AED training.

Students who successfully pass the course will receive a BLS-AED official training certificate, issued by the Catalan Resuscitation Council (CCR).

Nitrous Oxide Course

This programme offers an insight into nitrous oxide sedation dentistry methods and cardiopulmonary resuscitation. Clinical pharmacology medical gas concepts will be reviewed, as well as cardiopulmonary resuscitation practice, the use of defibrillators and conscious nitrous oxide sedation equipment management. The aim of this course on nitrous oxide is for students to take significant steps towards improving the quality of the treatment and to do so with confidence.

Learning results

- Surgical techniques for tooth extractions: roots, wisdom teeth, unerupted teeth.
- Diagnosis, planning and treatment of edentulism with dental implants.

- To become familiar with oral rehabilitation treatments with dental implants. To know how to diagnose and plan clinical cases from surgery to prosthetics.
- Pre-prosthetic and periodontics advanced surgical techniques.
- To know how to perform differential diagnosis of intraoral lesions.
- To know how to do biopsies in intraoral lesions.
- To learn how to do a differential diagnosis of X-ray images in conventional radiology, CT scans and cone beam CT scans.
- Treatment of maxillary cystic pathologies.
- Surgical treatment of periapical lesions.
- Frenulum surgical treatment (labial and lingual).
- Salivary lithiasis treatment in the Wharton conduct.
- Treatment and diagnosis of dentoalveolar fractures.
- To learn to present and debate clinical cases.
- To improve their public speaking skills.
- To know the basis of scientific research and methodology
- To know the steps in order to make a correct presentation of the doctoral thesis.
- To present a final master's degree project (FMDP).

European Association for Osseointegration Certified Dentist

Students must prepare clinical cases during the three academic years to pass the European Academy of Osseointegration (EAO) test and become an EAO Certified Dentist.

Facilities

UIC Barcelona believes that clinical practice on patients is crucial for training high-level professionals. The differentiation of our programs is marked by practice on patients.

The University Dental Clinic has 88 dental boxes, all of them equipped with state-of-the-art dental technology: 88 generalist booths, including 4 booths used for special patient care and 16 booths for surgeries and for conscious sedation.

The University Dental Clinic made approximately 82.000 visits in the last year.

The Clinic has two prosthetic dental laboratories, with the most up-to-date CAD/CAM units that allow students to apply the latest techniques in all areas of dentistry.

The equipment that this laboratory includes are:

- 4 milling machines: Lyra, Cerec, Roland and VHF K5
- 11 intraoral scanners (2 Carestream and 2 Trio Move), 1 Cerec yielded by Henry Schein, 1 3M yielded by 3M, 1 Trios 3Shape yielded by ETK Implants Iberia, 1 Trios 3Shape by Straumann, 1 Primescan by Dentsply, 1 Medit by Klockner and 1 Itero by Align.
- 1 3D printer
- 6 exocad design programs, 1 of 3shape and 2 of Cerec.

We have created **6 new laboratories**, one of them focused on dental research.

1 pre-clinical laboratory with **95 training simulators** and **digital radiology**. This facility allows students to train with augmented reality techniques before treating patients. With this step, virtual reality is introduced into the preclinical practices of students, helping to improve their training and it is also a great tool as a new teaching methodology. It is one more step in the innovation and improvement of the training of students. We also have a scanner and digital printer in the same laboratory.

UIC Barcelona also has 1 dental research laboratory.

2 diagnostic imaging rooms for taking panoramic dental X-rays and latero-lateral and posterior-anterior teleradiographies, periapical radiographs and CBCT scans.

Digital technology and implant-prosthetic planning programs allow students to train and work from the beginning with the latest technologies.

- Possibility of broadcasting dental interventions live.
- Smart storage room for delivery and collection of material.
- Sterilization unit for medical materials and instruments.

All resources are up-to-date and the university has agreements with different industries in the sector, thus strengthening ties between industry, universities and RDI.

The technology available to our students brings them closer to the reality of the day to day and prepares the student in all theoretical and practical aspects to be able to work in the clinic with maximum safety and professionalism.

We also have dentistry management software to keep track of students' and patients' progress.

We have 6 endodontic microscopes (Zeiss and Zumax)

Places in classrooms

2,355 places in the classrooms

88 places in the Clinic (dentistry booths)

192 places in gyms

120 places in IT classrooms

420 places in laboratories

415 m2 of laboratory facilities dedicated to research

Places in study rooms

361 seminars, multifunctional rooms and a Library study room.

Places in Libraries

The Library on our Sant Cugat campus measures 1,201.53 metres squared.

402 places for reading across the Library and three study rooms.

Admissions process

Personal interview: The personal interview will be carried out with the coordinator, director and professors of the Master's degree. Academic merits will be valued, as will the ability to work in a team and professional experience. At least one year experience after graduation is recommended. Training, courses and postgraduate programs would also be highly appreciated.

Theoretical test: Theory test of multiple choice answers about oral and maxillofacial surgery.

English test: This involves reading a text in English and then summarising it. An oral exam (First Certificate level recommended).

There would be two interview days available.

*In specific cases, the candidate may be asked to undertake a short internship within the Master's degree programme

Calendar

September 2023 to July 2026

Schedule*

First year:

Mondays from 10 a.m. to 2 p.m.
Tuesdays from 8.30 a.m. to 9 p.m.
Wednesdays from 8 a.m. to 9 p.m.
Thursdays from 8 a.m. to 9 p.m.
Fridays from 8 a.m. to 2 p.m.

Second year:

Mondays from 8.30 a.m. to 1.30 p.m.
Tuesdays from 10 a.m. to 9 p.m.
Wednesdays from 12 p.m. to 9 p.m.
Thursdays from 8 a.m. to 8 p.m.
Fridays from 8 a.m. to 2 p.m.

Third year:

Tuesdays from 10 a.m. to 2 p.m.
Wednesdays from 10 a.m. to 9 p.m.
Thursdays from 12 a.m. to 9 p.m.
Fridays from 8 a.m. to 8.30 p.m.

* This schedule is orientative. Direction of IMOS could alter the schedule giving sufficient advance notice

Pre-registration date

From January 2023

Price:

First year:

€28.956*

Second year:

€28.952*

Third year:

€24.898*

*Annual registration fees are included (€480/year). The annual registration fees have not yet been approved by the University's Board of Governors.

The price for the second and third years (2024-2025 and 2025-2026) has not yet been approved by the University's Board of Governors and is subject to an index-linked increase.

Places available

The seats available are limited.

Language

The official language of IMOS is English but it will be necessary to have knowledge of Spanish to work at the Clínica Universitaria de Odontología to communicate with patients. Through the University, Spanish classes can be provided to the student.

Accreditation

180 ECTS International Master's Degree in Oral Surgery.

Documentation required for pre-registration

- A filled-in pre-registration form
- 1 attested copy of the corresponding degree qualification (with an original stamp)*
- 1 Academic Certificate of qualifications (original or attested photocopy)*
- A photocopy of your national ID card (DNI) or passport.
- Payment of €90** and payment receipt sent by mail (Except for former UIC Barcelona degree students).
- Copy of CV listing courses and conferences attended.
- Letters of recommendation (recommended, not compulsory)

*For students from outside the European Union, both their qualifications and their degree qualification must be attested via the diplomatic route or carry a Hague Apostille stamp. (The degree qualification does not need to have been officially homologated).

*Candidates who are in the last year of their degree programme must provide a list of the qualifications they have obtained up until the date they register.

**Not reimbursable for administration fees.

Send to:

Paola Lago
Marta Utset
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Universitat Internacional de Catalunya
Hospital General Building
C/ Josep Trueta, s/n
08195 Sant Cugat del Vallès (Barcelona)

Material*

*Provisional list. The final list will be provided to the students before the start of the classes.

In order to join the Master's course students must bring the following equipment with them:

- 1.1. SLR digital camera with flash override
- 1.2. Set of mirrors and contrastador (black background) for intraoral photography.
- 1.3. Laptop.
- 1.4. Safety glasses.
- 1.5. Optional: Magnification 2,5x with a light source
- 1.6. To access the CUO every student will be expected to wear a protective face screen and use total protection goggles, except if they are wearing prescription glasses or magnifying loupes, in which case the total protection glasses will not be necessary.

2. Surgical Instruments:

- 2.1. Scalpel handle No. 7 (16cm) for 10 to 15 sheets
- 2.2. Clips gillis (1 with teeth, 1 without teeth)
- 2.3. Adson Forceps (with and without teeth)
- 2.4. Farabeuf retractors
- 2.5. 1 Langenbeck separator
- 2.6. 1 Separator minesota
- 2.7. Abreocas rubber wedges (medium and large)
- 2.8. Periosteal howard (one wide and one narrow)
- 2.9. Needle Holder 15cm tungsten tip
- 2.10. Mosquito Forceps (with teeth and toothless)
- 2.11. Curved Mayo scissors 1
- 2.12. 1 dissecting scissors 14cm Metzembraum
- 2.13. 1 legra two small sides
- 2.14. One middle two sides curette
- 2.15. 1 straight punch small
- 2.16. 1 straight punch medium
- 2.17. 1 set of Winters pointy
- 2.18. 1 set of Pott elevators
- 2.19. Field clamps 4
- 2.20. Allis forceps 1
- 2.21. 1 dental mirror
- 2.22. 1 syringe of anesthesia Uniject
- 2.23. 1 tongue depressor
- 2.24. 1 clamp gouge angled 15 cm
- 2.25. 1 periodontal probe
- 2.26. Surgical cassette

3. Prostheses Instruments:

- 3.1. LeCron for laboratory waxing
- 3.2. Electric wax spatula.
- 3.3. Great appetizer.
- 3.4. Small appetizer.
- 3.5. 6 or more complete sets of natural teeth (incisors, canines, premolars and molar).
- 3.6. 3 Sets exploration: 2 mirrors, 1 clamp, 1 exploration and periodontal probe.
- 3.7. Hammer sacapuentes Antoghyr manually.
- 3.8. Cement spatula.
- 3.9. Retraction cord spatula, Brand ROEKO, Ref. 520 001.

- 3.10. Composite spatula.
- 3.11. Spatula wax.
- 3.12. Glass tile.
- 3.13. Cup and spatula for alginate
- 3.14. Cup and spatula for plaster.
- 3.15. Cup of gum resin.
- 3.16. Iwanson Caliper.
- 3.17. 2 Syringes of anesthesia (Uniject).
- 3.18. Pliers Angle.
- 3.19. 2 Mosquitos.
- 3.20. 1 Koher.
- 3.21. Straight scissors.
- 3.22. Miller clamp.
- 3.23. Semi-adjustable articulator mark ARTEX (Option to purchase at the UIC Barcelona).
- 3.24. Rotary Material: Turbine, adapter, handpiece, handpiece, micromotor, instrument box (Hu - Friendly DIN IMDIN Ref. 13).
- 3.25. Modeling wax.
- 3.26. Metal thickness meter (Ninstrom).
- 3.27. Set for waxed PK (Pk 1, 2, 3, 4 and 5).
- 3.28. Cutter.

Instruments and materials needed

General information

The International Master in Oral Surgery is a program with a significant clinical workload. It is mandatory to have the material that is detailed below for the correct functioning of the program.

At the beginning of the course, visits from different manufacturers and brands are facilitated, which usually offer special deals for students.

You will usually work in pairs, so part of the material can be shared (for example, the camera). Although it is an option, we strongly recommend that the material be personal.

General materials and devices.

-PC or Apple Laptop Today's digital planning programs require computers with powerful processors and graphic cards to run smoothly.

-Presentation programs such as Keynote or PowerPoint.

-Pen drive of at least 32 Gb.

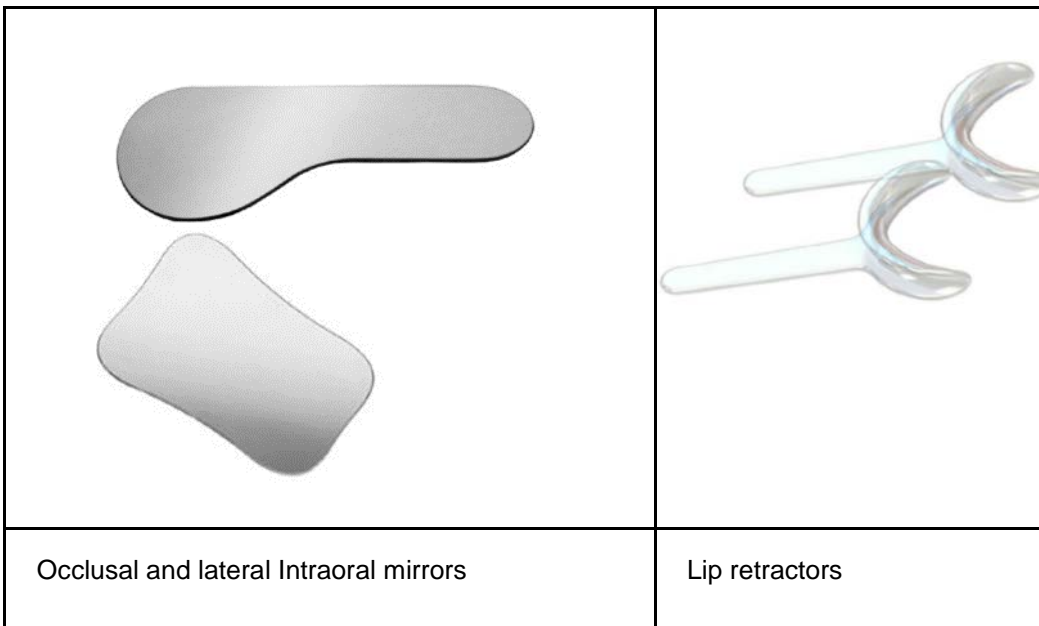
Materials and instruments for the clinic.

The University Clinic of Dentistry (CUO) provides work uniforms, but not the appropriate footwear for the clinic. The CUO supplies the consumable material necessary for patient care (alginate, silicones, sutures, surgical drapes, etc.) and the surgical sets for the placement of implants from the different brands.

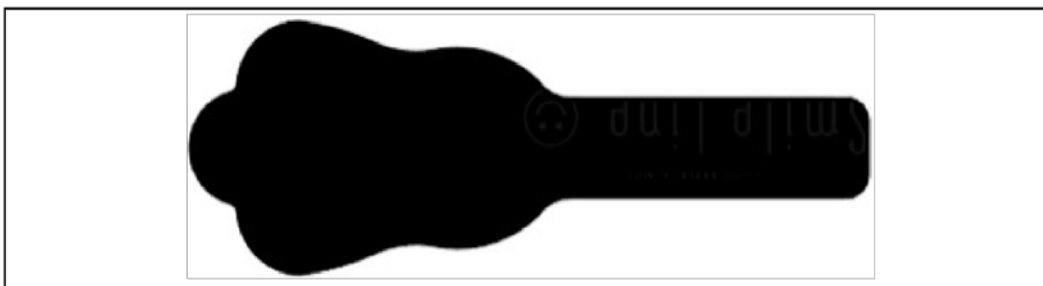
Phosphor plates for intraoral X-Rays * (*ask for appropriate brand)



Intraoral mirrors and lip retractors



Dental photo contraster





Reflex SLR camera + macro + ring flash (additional Twin flash recommended)

	
<p>Example Nikon D3500 + Macro Lens 105 mm + ring flash Sigma EM-140 DG</p>	<p>Example Canon EOS 2000D + Macro Lens 100mm + ring flash Canon</p>

- Rotary instrument set:

- Turbine and adaptor Midwest type (M4)
- Contra-angle
- Handpiece
- Micromotor

	<p style="text-align: center;">MIDWEST</p> 
<p>Rotary instrument set</p>	<p>Midwest connection (M4)</p>

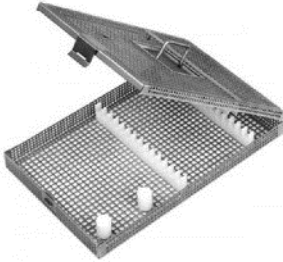


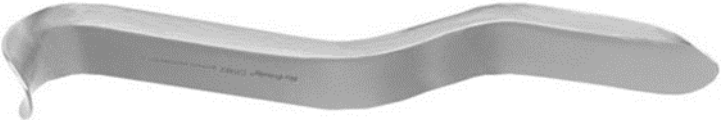


<p>Screen / safety goggles</p>	
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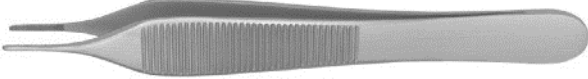




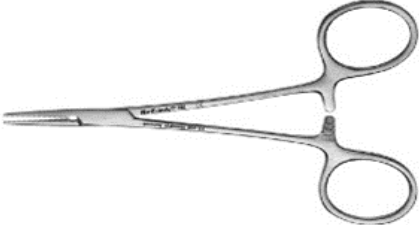
Surgical set



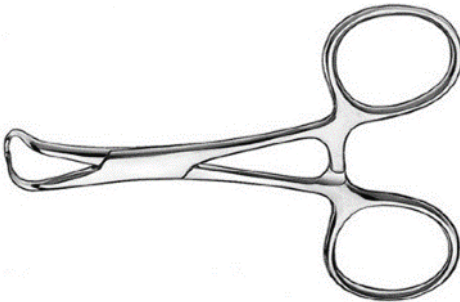
The surgical set consists of an autoclavable box or cassette in which the students will deposit their instruments. Instruments must be those specified in the list, but they can be of different manufacturers

and qualities. As mentioned before, different commercial brands will make their offers for the acquisition of the material and instruments by the student, at the beginning of the year. Students are free to choose the material independently.






The minimum recommended (mandatory) instruments for implant placement and oral surgery the following.






<p>Surgical cassette. It will have the appropriate size for all the instruments</p>	
<p>Mirror</p>	
<p>Periodontal probe (UNC-15)</p>	
<p>Minnesota retractor</p>	
<p>Circular Scalpel handle (NOT flat)</p>	
<p>Prichard</p>	

Freer periosteal	
Adson tissue pliers plain	
Pinza Adson 1x2 (teeth)	
Iris scissors (straight/curved)	
Lucas Curette #85 (1), #86 (1), #87 (1)	
Molt Curette	
Mosquito straight(1) and curved (1)	

<p>Crille-Wood Needle Holder</p>	 A pair of surgical forceps with long, tapered jaws and a locking mechanism. The handles are yellow and the jaws are silver.
<p>LaGrange Scissors</p>	 A pair of surgical scissors with long, tapered jaws and a locking mechanism. The handles are silver.
<p>Towel clamp (4)</p>	 A pair of surgical forceps with long, tapered jaws and a locking mechanism. The handles are silver.

Additional material HIGHLY recommended:

<p>Castroviejo Needle Holder</p>	 A Castroviejo Needle Holder, a specialized dental instrument with yellow handles and serrated jaws, used for holding needles during suturing.
<p>Tunneling instruments</p>	 Two tunneling instruments, which are long, thin, and curved dental tools used for creating tunnels in bone or soft tissue.
<p>Soft tissue pliers</p>	 Three soft tissue pliers, which are dental instruments with long, thin jaws and textured handles, used for grasping soft tissue.
<p>Farabeuf retractors</p>	 A Farabeuf retractor, a long, curved dental instrument used to retract soft tissue during surgical procedures.
<p>Low quality needle holder</p>	 A low quality needle holder, a standard dental instrument with two circular handles and pointed jaws, used for holding needles.

<p>Bone Rongeur</p>	
<p>Langenbeck retractor</p>	
<p>Metzenbaum scissors</p>	
<p>Mouth prop S, M, L</p>	
<p>Mixing Bowl</p>	



Instruments and materials are mandatory from the first day, except for the surgical set, which will be mandatory after November 1.