

# Masters Course Proposal

## Course offering proposal for university master's course for academic year 2019-2020

**Course title:** Hands-on surgical approaches to the anterolateral skull base, reconstruction, and indications

**Level:** Second level

**Duration:** full year

**Credits:** 60 (1 year)

### New course offering

#### Overview

There is an insufficient number of cadavers for teaching and research purposes in Italy. This problem has hampered surgical training, particularly of highly complex techniques, limiting opportunities for learning and demonstrating competence in the performance of procedures prior to transitioning those skills to actual patients. One way to gain necessary experience is to attend specialist dissection courses; however, they are often held abroad, are costly, and may not ensure continuity of learning or recognition of professional certification and qualifications.

This course offering is designed as part of a continuing professional development program in which the achievement of theoretical knowledge and practical skills is certified. A unique feature of the course is the opportunity for continuity of learning on a human cadaver head per participant for the entire duration of the course. Exercises will be guided by faculty from a multidisciplinary team of specialists. Course content will be covered in activities divided into three courses on transcranial and transnasal approaches via microsurgical and endoscopic techniques. Various treatment options will be explored and discussed; each session will finish with a discussion to help determine which option is best for each case.

### Scientific Committee

Second name, first name	Academic position	Subject Area	University/Department/Institution
Marchioni Daniele	Full Professor – ENT Clinic Director	Med 31	University of Verona
Nocini Pier Francesco	Full Professor – Maxillofacial Surgery Clinic Director	Med 29	University of Verona
Pinna Giampietro	Neurosurgery Clinic Director	Med 27	AOUI Verona
Sala Francesco	Associate Professor - Clinical Neurosurgery	Med 27	University of Verona
Sbarbati Andrea	Full Professor – Human Anatomy	Bio 16	University of Verona
Sereni Gianni	Business manager		ICLO Verona srl
Talacchi Andrea	University Researcher – Clinical Neurosurgery	Med 27	University of Verona

### Course Director

Second name, First name	Academic Position	Subject Area	University/Department
Talacchi Andrea	University Researcher –	Med 27	University of Verona

	Clinical Neurosurgery		
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Department/school or external body responsible for organizational and administrative management of the course.

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Other universities potentially interested in collaborating in the course.

Other institutes and/or external bodies interested in collaborating in the course.

External body	Type of collaboration	Amount financed	Other collaboration
ICLO Verona srl	Logistics (rooms and facilities)		Organizational and accounting

### Learning Objectives

Upon completion of the course, participants will be able to apply their theoretical and practical competencies to surgical approaches to the anterolateral skull base for the treatment of brain diseases. Specifically:

- Acquire anatomical knowledge about simple and complex approaches
- Understand functional changes
- Understand clinical applications
- Acquire a range of views and techniques from specialists from different surgical disciplines
- Determine the best technique for treating similar pathologies in each case
- Perform surgical techniques on the cadaver using advanced technologies
- Experiment with microsurgical and endoscopic techniques
- Watch live or recorded activities and discuss cases with the experts
- Appreciate the importance of reconstruction associated with the surgical technique
- Acquire competence in evaluating clinical outcome
- Discuss potential clinical complications associated with the surgical technique
- Learn from the experience of international specialists
- Create a sharing environment that fosters long-term collaboration

### Target Audience

The course is targeted to neurosurgeons, maxillofacial surgeons, otorhinolaryngologists, and other health professionals listed in the university course plan (Table-1M).

### Career Advancement

1. Knowledge. Upon completion of the course, participants will be able to pursue a career in a specialist area in basic (anatomy) or clinical (neurosurgery, maxillofacial surgery, otorhinolaryngology) medicine.
2. Skills. Upon completion of the course, participants will be able to demonstrate clinical skills in performing and managing surgical interventions: formation of the treatment team, surgical planning and follow-up, design and develop continuing medical education programs.
3. Competencies. Upon completion of the course, participants will have a thorough knowledge of theoretical and practical requirements for engaging in collaborations and improving outcomes in patients with anterolateral brain diseases.

**Job market sector/work opportunities:** surgeon-physicians specialized in neurosurgery, maxillofacial surgery, otorhinolaryngology.

Consultation with parties (work opportunity according to professional role/learning objective) interested in course design/implementation

1. Consulted parties: national scientific societies and surgical experts
2. Mode of consultation (e.g., focus groups, interviews, regular meetings, placement analysis of previous course offerings, other...): direct consultation, seminars, conferences, courses
3. Documents of act and their access: Italian norms on the use of cadavers for research or stud purposes (Royal Decree 31 August 1933, no. 1592 and DPR 285/90 and Mortuary Regulations, §VI, art. 40-43.

**Course Description**

**Agenda, accreditation, curriculum, faculty**

The master’s course comprises a total of 1500 hours.

**Framework of credit ratings per activity**

Lecture/reading – 1 credit = 25 hrs, of which 8 in classroom and 17 in self-directed activity

Exercise/laboratory – 1 credit = 25 hrs, of which 15 in classroom and 10 in self-directed activity

Professional training in instructor-led small group sessions – 1 credit = 25 hrs, of which 0 hrs in classroom and 25 in self-directed activity

Rotation – 1 credit = 25 hrs of self-directed activity

Personal learning project/final assessment – 1 credit = 25 hrs in self-directed activity

Educational Activity	Hours	Credits
Lecture	160	
Distance learning	160	
Practice/workshops/practice on patients/rounds	300	
Final assessment	25	
Self-learning	855	
<b>Total</b>	<b>1500</b>	

**Educational Activities**

The course comprises three full-immersion 3-day modules conducted every quarter year plus distance learning activities and activities held at the AOUI, Verona.

Transcranial approaches: pterional and derived approaches. The course will address transcranial approaches to the anterior and middle cranial fossa, the pterional and other derived approaches, orbitozygomatic, fronto-orbital, zygomatic, and minimally invasive approaches, the intracranial areas that can be exposed, including the plenum sphenoidale, the tuberculum sellae, the sellar and parasellar region, the cavernous sinus; the cerebral areas that can be exposed, including the frontobasal, hypothalamic, temporomesial structures, fissures and cisterns.

Medial subfrontal approaches: The course will primarily address endoscopic transnasal approaches to the skull base for the treatment of intracranial frontobasal, ethmoidosphenoidal lesions, including the sellal turcica, and parasellar region, and the clival region including the atlo-occipital joint. Various treatment options will be explored and discussed. Particular attention will be devoted to reconstruction techniques.

Guided dissection of the anterolateral skull base, including the orbit. A brief theoretical exposition on surgical approaches to the orbit will round up the range of techniques that can be performed. This course will be mainly conducted in the laboratory so that participants can refine their techniques and develop their interests.

**Final Assessment**

At the end of the course, a small-group discussion will be conducted on diagnosis of the clinical case, the choice of intervention, the surgical plan, and the strategies to handle eventual complications. Assessment will also be based on active participant engagement in activities.

Attendance is obligatory in 75% of the sessions.

The course will be held in Italian and English.

The course will run from early January 2020 through late December 2020.

Final assessment will be held in December 2020.

### **Location**

ICLO Verona srl - Via Evangelista Torricelli 15/A - 37135 Verona - Italia

AOUI (Azienda Ospedaliera Universitaria Integrata) Verona - Piazzale Stefani 1 - 37128 Verona - Italia

### **General Information for Course Participants**

Each participant will receive a cadaver head on which to work, which will be kept at the ICLO. Participants will also receive bibliographies and Web links for the distance learning components of the course. The three courses will be held in Verona on three weekends, Friday through Sunday (dates to be announced in September 2019) to accommodate participants' work schedules.

Activities will include multimedia lectures that are propedeutic to the cadaver practicals; much of the individual work in the dissection lab will be tutor guided step by step, following practical demonstration of a procedure. Participants will work in pairs and alternate with the principal operator in carrying out the procedure. Sessions will include presentation of recorded and live events, clinical case discussions, and exemplary cases. The course faculty will be selected based on their clinical and teaching experience; the course will have a tutor to participant ratio of 1:2. At least one expert of international renown will be invited to teach on the course.

During the intervals between course modules, participants will take part in continuing professional development activities via e-learning of lesions, clinical cases, conferences, seminars, and, importantly, surgical fellowships at the AOUI of Verona, as requested and as possible in operative scheduling at the surgical services of the departments of neurosurgery, maxillofacial surgery, and otorhinolaryngology.

**Places available:** minimum 8, maximum 14

### **Due Dates**

Applications must be submitted by 9 September and no later than 15 November 2019

Participant selection: 23 November 2019

Publication of participant roster: 7 December 2019

Payment of registration fees: 15 December 2019

### **Admission Requirements**

A successful applicant for admission to the master's course will:

- Hold a medical degree and medical board certification to practice medicine and/or surgery or
- Hold a medical degree awarded by a recognized university outside Italy, equivalent by level, nature, content, and academic rights to an Italian degree required for application to the course.

Such applicants will attach and present the following original documents:

1. Medical degree diploma with legalized translation and a declaration of value issued by the Italian consulate of the country where the diploma was obtained.
2. A decree by the Ministry of Health confirming the equivalence of professional qualification to practice medicine in Italy.

Non-EU nationals residing in Italy will need to upload their permit to stay in Italy, which is valid and states the reason it was issued. Non-EU nationals not residing in Italy will need to upload their study visa and postal receipt of their request for permit to stay in Italy. On receipt of the permit, they will present a photocopy of the permit with their application.

Applications will be accepted only for the full one-year master's course.

### **Admissions**

Should the number of applicants exceed the number of places available, the Scientific Committee will issue a second participants' roster based on the applicant's CV graded as follows: medical degree and postgraduate studies (if completed) (10 points); training experience or scientific publications or motivational aspects for participating on the course (10 points).

### **Award of Master's Degree**

On completion of the course, participants who have fulfilled the course requirements and passed the intermediate and final assessments will be awarded a First or Second Level Master's Degree signed by the university rector and general director. Upon approval by the Scientific Committee, candidates will be admitted to the final assessment.

### **Course tutor:**

#### **Information**

For questions about course curriculum, contact:

Andrea Talacchi MD

Head of Unit of Neurosurgery, Azienda Ospedaliera San Giovanni Addolorata, Rome

Dept. Neurosciences, Biomedicine, and Movement, University of Verona

e-mail [andrea.talacchi@univr.it](mailto:andrea.talacchi@univr.it)

For questions about course application and registration, contact:

For macroareas of life sciences and health care

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For other macroareas

U.O. Alta Formazione e Apprendimento Permanente

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### **Course fees and tuition**

Total course tuition: € 4.016,00

Arrangements may be made for a flexible payment schedule.

Participants will be provided with a Participant Evaluation of Course questionnaire to rate their satisfaction with the quality of service organization, learning objectives, and training modalities.

### **Date and signature of approval**

*Amber Louie*

Signature of course director

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