







# CALL FOR THE UNIVERSITY MASTER

# "ADVANCED QUALIFICATION COURSE IN TELEMEDICINE AND TELEPHARMACY"

(UNICAM) UNIVERSITY OF CAMERINO ACADEMIC YEAR 2020/2021



# CALL FOR THE UNIVERSITY MASTER "ADVANCED QUALIFICATION COURSE IN TELEMEDICINE AND TELEPHARMACY "

# **UNIVERSITY OF CAMERINO**

ACADEMIC YEAR 2020/2021 1<sup>ST</sup> EDITION

# The University of Camerino as per the Decree of the Rector No. 174 dated 2 July 2020

### ACTIVATES the University Master "ADVANCED QUALIFICATION COURSE IN TELEMEDICINE AND TELEPHARMACY "

# Art. 1 - AIMS AND TRAINING OBJECTIVES

Learning objectives of the course will include:

• Describe the main types of telemedical applications in current use and identify the primary actors;

- Promote and introduce telemedicine and e-health services and programs;
- Identify the conditions for successfully implementing telemedicine and e-health services.
- Apply telemedicine and e-health services in professional health work;
- Use telemedicine for second and third opinion teleconsultations;

• Training in information security, interoperability, analysing data, design and implementation of tools to measure data, software development, data-driven solutions development, 3D Image processing, project management and communication.

• Training in project management, communications, computer literacy, information security, and the use of clinical software.

• Training in in data privacy, information security, ethics, software engineering and database development

# Art. 2 - PROFESSIONAL PROFILE

Health professionals including physicians, nurses, dentists, pharmacists and midwives. These professionals should learn skills and aptitude for communication, data analysis, computer literacy, medical devices compatibility, data protection programs, mobile applications, cloud storage, surfing internet, and the ability to read, understand and forward information using a smart device.

• Health informatics professionals. These professionals acquire skills in information security, interoperability, analyzing data, design and implementation of tools to measure data, software development, data-driven solutions development, 3D Image processing, project management and communication.

• Non-clinical and administrative staff. This people should acquire skills in project management, communications, computer literacy, information security, and the use of clinical software.

• IT professionals working in the healthcare environment. These professionals should acquire skills in data privacy, information security, ethics, software engineering and database development.

# Art. 3 - EMPLOYMENT PROSPECTS OR POTENTIALITIES FOR IMPROVING A POSITION OR ROLE ALREADY PLAYED

A main purpose of the Course is the improvement of the technological equipment available with the possibility of wider use of technological devices for the organization and management of Telemedicine and Telepharmacy services in remote areas.

Training activities		ECTS/ CFU	Hours of FAD	N. hours Frontal lesson	N. hours Alternative teaching*	N. hours Individual study
Common modules						
1. e-Health without borders		5	25	20	20	60
<ol> <li>Telecommunication systems and their use in transferring biological and medical data</li> </ol>		5	25	20	20	60
3. Clinical decision support systems		3	15	9	12	39
4. The bioinformatics		2	10	6	8	26
<ol> <li>Organization of health-care systems. Organization, collection, handling and use of medical data in telemedicine</li> </ol>		5	25	20	20	60
6. Local rules for data security and management		4	20	12	16	52
<ol> <li>Electronic health record preparation and management</li> </ol>		4	20	12	16	52
<ol> <li>Informed consent preparation and management</li> </ol>		3	15	9	12	39
Practical activities (delivered either in English or Italian depending on the attendant's choice)						
1. Telemedicine and in loco assistance of patients		3	15	9	12	39
<ol> <li>Teleradiology, diagnostic imaging, Telemedicine in support of diagnostic services</li> </ol>		2	10	6	8	26
<ol><li>Telemedicine services for pregnancy and pediatrics</li></ol>		3	15	9	12	39
4. Telemedicine delivery experiences		3		75		
5. The e-approach for diagnostic services		2	10	6	8	26
Internship		6				150

# ART. 4 – COURSE PLAN

Final Test		10				250
Тс	otal	60	205	213	164	918

\* Alternative teaching means: exercises/workshops; seminars/ case reports; company visits/ participation in conferences; project work; etc.

# **Art. 5 – ORGANIZATION OF TEACHING ACTIVITIES**

1. The training course lasts one year

2. Lectures will start in the month of May 2021 and will end in April 2022.

4. The lectures may also take place through the use of a telematic platform for online teaching (Cisco Webex or other similar technologies such as Google Meet or Msteams). The indications and instructions will be indicated to the subscribers at the time of their use.

The course will include 8 + 5 teaching units. Each teaching unit consists of modules. A module includes a series of lessons, partly to be used for e-learning and a library, where learners will find selected insights and otherwise difficult to find for those working in the fields of professional practice. For each module there is an on-line verification.

Case studies could be also proposed. They will be carried out through videoconference and will try to call the attention of learners on some practical aspects of telemedicine and digital health. General discussion sessions will be held in the form of forums.

#### **INTERNSHIP** (obligatory)

In addition to the lectures, videoconferences and e-learning an internship for learning the main knowledge necessary for practical applications of telemedicine and telepharmacy. The different themes of the internship will be preceded by the illustration of the activities with lectures of frontal type that will be **realized in Rome (Italy) at the International Radio Medical Center Foundation (C.I.R.M.) or in Karachi at the Athena Center for Advanced Research in Healthcare.** 

At the end of the course and after having passed a final exam, participants will receive the Diploma of second level Master in Advanced Telemedicine and Telepharmacy.

# **Art. 6 – ADMISSION REQUIREMENTS**

The Course is open to applicants who are employed, unemployed, or have never been employed, and who have a Master degree in the Medical-Health area, Scientific Technological area and Science and Technology, earned in at least five year program.

All attendants to the Course must have computer skills and familiarity with internet use needed to follow the interactive e-learning lessons. They must have a multi-media personal computer with broadband service, and possess sufficient knowledge of English to the courses which is delivered in English.

**Simultaneous enrolment in several courses is allowed only in the case of enrolment in a higher training course:** advanced training course and specialized professional training (Law 341/1990 art.6) 2).

#### **GROUP OF DEGREE PROGRAMMES**

For the topics covered, it is necessary to have a degree in one in the following disciplinary areas, corresponding to the groupings provided by D.M. 6/2019, Annex D, in implementation of D.M. 270/2004.

THREE-YEAR DEGREES		MASTER (TWO-YEAR DEGREE	SINGLE CYCLE DEGREE COURSES		
Medical Services (A)		Medical - Medical (A)	х	Medical-Health (A)	x
Scientific and technological (B1)		Scientific and technological (B1)		Scientific and Technological (B)	
Scientific and technological (B2)		Science and technology (B2)		Humanistic - Social (C)	
Humanistic - Social (C1)		Humanistic-Social (C)			
Social humanities (C2)					

# Art. 7 - FOREIGN ATTENDANTS

Candidates graduated outside Italy and having obtained a qualification comparable in level, nature and content and academic rights to the Italian title required for access to the Course may apply for enrollment. For recognition of the graduation title, the University of Camerino will refer to the current legislation regulating the subject, but registration should be evaluated by the Master's Scientific Committee for assessing the compliance of it. In particular

- a) The student's affairs office will check administrative aspects of the studies curriculum;
- b) The Scientific Council of the Master will assess the compliance of the curriculum of studies with the admission requirements.

Candidates graduated abroad should also provide

Original degree diploma translated and legalized;

- a) Declaration of value;
- b) Diploma supplement certificate or if not available certificate of exams passed, translated and legalized.

# Art. 8 - MINIMUM AND MAXIMUM NUMBER OF ADMISSIONS

- 1. The course is limited in number. The minimum number for activation is set at 20 attendants and the maximum number at 40.
- 2. In the event of exceeding the maximum number of members, indicated in paragraph 1, the admissions are identified according to the selection procedure referred to in art. 10.
- 3. Failure to reach the minimum number of students does not allow the activation of the course.

# Art. 9- OBLIGATIONS TO ATTEND AND RECOGNIZE TRAINING ACTIVITIES CARRIED OUT IN PREVIOUS CAREERS

Attendance at educational activities may not be less than 70% of the total number of those provided for. There is no recognition of training activities or experience and professional skills already acquired.

# **Art. 10 - ADMISSION PROCEDURE AND SELECTION OF CANDIDATES**

- ✓ Admission to the course is conditioned first of all by the result of the assessment of suitability, by the Scientific Council of the course, which is based on the coherence of the academic and professional curriculum of the candidate and compliance with the requirements referred to in Art. 4.
- ✓ If the number of admissible applications is higher than the maximum number of seats available, a selection procedure will be activated, to be carried out in the following way:

Evaluation of curricula and titles with definition of a ranking

✓ Within 5 days of the closing date for the submission of the application form will be communicated to all candidates, to the e-mail address indicated in the application form, the results of the verifications referred to in paragraph 1 of this article or the possible activation of the selection procedure referred to in paragraph 2, with information on the place, dates and times of performance and the evaluation criteria adopted.

# Art. 11 - DEADLINE AND PROCEDURE FOR SUBMITTING A REGISTRATION APPLICATION

The application form must be completed and submitted, by 12:00 (CET) on 14 May 2021, exclusively through an on-line computerized procedure, available in the appropriate section of the University's website, at: http://www.unicam.it/miiscrivo/ where you can also access all the information and additional information related to the same registration procedures. At the end of the completion is not required to pay the first instalment of the registration fee, which will be paid only after the communication of activation of the course, as specified in the following Art. 14.

# DEADLINE FOR SUBMITTING AN APPLICATION FOR REGISTRATION

14 May 2021

**BEGINNING OF THE COURSE** 

31 May 2021

#### **END OF THE COURSE**

1 April 2022

#### NUMBER OF ELIGIBLE STUDENTS

Minimum number **20** Maximum number **40** 

#### **INTERMEDIATE TEST**

For each module with e-learning activities, an on-line verification is provided. At the end of the course a frontal examination will have to be passed in order to verify the acquisition, from the students, of the fundamental contents developed in the relative period.

#### REGISTRATION

The application, addressed to the Rector of the University of Camerino, must be made online, in the *terms provided above*.

On the website <u>http://www.unicam.it</u>/reginfo/iscrizionemaster. Information and support for registration and any changes not provided for in this notice are available.

In case of difficulties, please contact the Master's Office, the e-mail <u>master.ehealth@unicam.it</u> <u>maddalena.falcioni@unicam.it</u>.

#### To define the registration you must attach

- 1) self-declaration (Annex A) completed and signed available together with the application form;
- 2) a copy of a valid identification document;
- 3) curriculum vitae in European format;
- 4) indication of the degree rating;
- 5) any relevant certificates for selection.

# **Art. 12 - REVOCATION, SUSPENSION OR RENUNCIATION**

- 1. The student who does not fulfil the minimum requirements of attendance provided by the course decays from the quality of the student.
- 2. If the candidate fails to obtain the qualification within the deadline for the final test of the year of registration, he or she shall forfeit his or her status as a candidate. In exceptional cases, the Scientific Council may provide for a further session to be held by the end of the academic year of reference of the course.
- 3. Failure to **pay the second instalment** within 30 days of the deadline, will automatically result in the forfeiture of registration and the consequent loss of the right to participate in the activities provided in the course plan as well as to achieve the final title.
- 4. In general, the suspension of frequency obligations cannot be allowed. Only in cases of prolonged illness (exceeding the maximum percentage of absence), pregnancy or maternity/paternity (at the request of the person concerned), the suspension of training may be granted to the Course, upon submission of the application to the competent office. In these cases it is possible to obtain the admission in excess of the edition in the next academic year, subject to the re-edition of the Course
- 5. The candidate can give up his career at any time by submitting an application. Renunciation results in the loss of the status of corsista. At the time of renunciation the student is not entitled to reimbursement of any fees paid.

# Art. 13 - REGISTRATION FEES

Members with disabilities recognized pursuant to art. 3 paragraph 1, of the Law of 5 February 1992 n. 104 or with invalidity equal to or greater than 66% are required to a reduced contribution of 50% (they are not exempt from the payment of any special fees provided for by the late payment contributions).

FULL FEE		€ 2.000,00			
Instalments (maximum 2 instalments)					
I <sup>st</sup> INSTALLMENT	€ 1.200,00	by 14 May 2021			
II <sup>nd</sup> INSTALLMENT	€ 800,00	by 15 December 2021			
REDUCED ALLOWANCE	FOR HANDICAPPED	€ 1.000,00			
PERSONS					
I <sup>st</sup> INSTALLMENT	€ 600,00	by 14 May 2021			

### II<sup>nd</sup> INSTALLMENT € 400,00 by 15 December 2021

The payment of the second instalment made after the deadline will entail the application of a late payment contribution of  $\in$  25.00.

# After the application deadline, an applicant who decides of not continuing the Master will not be able to receive reimbursement for the amount paid.

## Art. 14 - FINAL TEST AND ISSUE OF LICENCES

At the end of the course, only those who: will be in compliance with the training requirements; have attended at least 75 % of the course (lectures); have completed the satisfaction questionnaire; will be able to take the final test, which will take place in the following ways: Written subject followed by oral discussion. They will be then admitted to prepare and defend a thesis.

Having passed the final examination, they will receive from the University of Camerino the Diploma of the University 2<sup>nd</sup> Level Master.

#### **EVALUATION OF THE MASTER PROGRAM**

Before the conclusion of the course, students must fill-in the **Evaluation Form** provided by the Director of the Master or available on the UNICAM web site 'quick link' – MASTER E CORSI POST-LAUREA [MASTER AND GRADUATE COURSES], then MODULISTICA [FORMS].

### Art. 15 - PROCESSING OF PERSONAL DATA

1. The personal data provided by the candidates and members with the registration application shall be processed in compliance with the principles set out in Legislative Decree no. 196 of 30 June 2003, "Code on the protection of personal data" and the GDPR (EU Regulation 2016/679).

2. The application for the course, also as an Auditor, includes: expression of tacit consent that the personal data of the candidates and those relating to the selection tests are published on the website of the University and are processed exclusively for statistical purposes and analysis of the effectiveness of training processes.

#### **DIRECTOR OF THE MASTER**

Prof. Seyed Khosrow Tayebati tel. +39-0737/403305 and e-mail: Khosrow.tayebati@unicam.it

#### SCIENTIFIC COUNCIL

#### **Scientific Council Board**

	Teacher	Position	Academic Discipline for University Teaching
Director	Prof Seyed Khosrow Tayebati	Associate Professor	BIO/16
Member	Prof Francesco Amenta	Full Professor	BIO/16
Member	Prof Gabriella Marucci	Associate Professor	CHIM/08
Member	Prof Daniele Tomassoni	Associate Professor	BIO/16

#### ORGANIZATIVE SECRETARIAT FOR THE COURSE:

#### (Information about Master's applications, course dates, requirements)

**Camerino:** Scuola di Scienze del Farmaco e dei Prodotti della Salute [School of Medicinal and Health Product Sciences], Centro Ricerche Cliniche, Telemedicina e Telefarmacia [Center for Clinical Research, Telemedicine and Telepharmacy]

Dr Gopi Battineni tel. +39-0737-401726 and e-mail: master.ehealth@unicam.it

For information on the online registration procedure: Maddalena Falcioni, tel.0737402070 e mail: <u>maddalena.falcioni@unicam.it</u>

## PERSON RESPONSIBLE FOR THE PROCEDURE

In accordance with the provisions of art. 5 of Law August 7, 1990, n. 241, the person responsible for the procedure referred to in this notice is the Educational Manager Laura Carioli.

The General Director Dr Vincenzo Tedesco