Università	Università degli Studi di BRESCIA
Classe	LM-67 - Scienze e tecniche delle attivita' motorie preventive e adattate
Nome del corso in italiano	Exercise, Rehabilitation and Nutrition in an Aging Society - Esercizio, riabilitazione e nutrizione in una societa' che invecchia *adeguamento di: Exercise, Rehabilitation and Nutrition in an Aging Society - Esercizio, riabilitazione e nutrizione in una societa' che invecchia (1380679)*
Nome del corso in inglese	Exercise, Rehabilitation and Nutrition in an Aging Society
Lingua in cui si tiene il corso	inglese
Codice interno all'ateneo del corso	08648^99^017029
Data di approvazione della struttura didattica	12/04/2018
Data di approvazione del senato accademico/consiglio di amministrazione	17/04/2018
Data della consultazione con le organizzazioni rappresentative a livello locale della produzione, servizi, professioni	27/01/2014
Data del parere favorevole del Comitato regionale di Coordinamento	30/01/2014
Modalità di svolgimento	a. Corso di studio convenzionale
Eventuale indirizzo internet del corso di laurea	http://www.unibs.it/node/8304/
Dipartimento di riferimento ai fini amministrativi	MEDICINA MOLECOLARE E TRASLAZIONALE
EX facoltà di riferimento ai fini amministrativi	
Massimo numero di crediti riconoscibili	*DM 16/3/2007 Art 4* **Nota 1063 del 29/04/2011**
Corsi della medesima classe	SCIENZE E TECNICHE DELLE ATTIVITÀ MOTORIE PREVENTIVE E ADATTATE

Qualifying educational objectives of the degree class: LM-67 Sciences and techniques of preventive and adapted motor activities

Graduate students of the Master's Degree in *Exercise, Rehabilitation and Nutrition in an Aging Society* must be able, with extensive decision-making powers and autonomy, to use advanced cultural, methodological and practical technical tools necessary for:

the design and execution of motor activity programs aimed at achieving the recovery and maintenance of the best psycho-physical wellbeing conditions for various age group subjects with different physical conditions, with attention to gender specificity;

the organization and planning of specific activities and lifestyles aimed at the prevention of disease and improvement in the quality of life through physical exercise;

prevention of postural vices and post-rehabilitative motor recovery aimed at maintaining physical efficiency

the planning, coordination and evaluation of motor activities suitable for people with disabilities or for individuals in clinically controlled and stabilized health conditions

To achieve this, graduate students must acquire, relative to specific professional objectives of the course, adequate motor techniques for not less than 20 credits through internships at suitable facilities under the direct responsibility of the universities; they must also have in-depth knowledge of the modifications and the functional adaptations deriving from physical exercise; of the methods of assessing the state of physical efficiency and exercise planning, for healthy subjects as well as for disabled individuals or with stabilized functional limitations of various types, deriving from pathologies that can benefit from physical exercise; of the methodologies and the educational, communicative and psycho-motor techniques aimed at the subjects practicing the exercise; the knowledge of at least one written and oral language of the European Union in addition to Italian. The specific and characterizing skills of a Master's degree graduate in this degree class should therefore primarily concern: the benefits and risks of practicing motor activities in people of different age, gender, psycho-physical conditions, psycho-motor skills, and the level of risk associated with chronic outcomes of various diseases.

the technical direction and supervision of motor programs adapted to healthy adults, adolescents, the elderly, subjects with postural defects or with stabilized clinical pictures concerning different organs and apparatuses, knowing the possible complications that exercise can involve in each category and the precautions to prevent them;

the planning and supervision of individualized physical exercise proposals, based on health indications and motor assessment data, establishing type of exercise, intensity, duration, frequency, progression, precautions, for a wide variety of chronic pathologies and physical and mental conditions of disability;

adaptations of the human organism vital functions in response to physical activity practices, in relation to gender, age, state of health or clinical condition of each subject;

post-rehabilitative physical exercise evaluation tests, in terms of modalities, protocols, physiological measurements and expected results, specific for different populations, including subjects with cardiovascular, pulmonary, metabolic and other diseases in a stabilized phase from the point of view clinical and rehabilitation, children and the elderly; functional modifications and absolute contraindications related to the exercise tests, the recognition of subjects requiring health supervision during the sub-maximal and maximal exercise tests, as well as subjects requiring a health assessment before engaging in a motor program; risk factors for individuals with cardiovascular disease, pulmonary, metabolic and other nature, and understanding of prognostic indicators for high-risk subjects; as well as the knowledge of the effects of these diseases on the physical performance and health of the subject during the tests and the practice of physical exercise; the technical conditions and clinical symptoms that require the arrest of an exercise test; the most frequently used pharmacological strategies for

prophylactic and therapeutic purposes in diseases causing disability in the different age groups, the effects of these on the responses to the exercise tests, as well as the changes in the activity of drugs induced by the exercise itself; procedures to cope with cardio-respiratory emergency situations, which may arise before, during and after an exercise test or a guided motor activity session; the necessary behavioral strategies for changes in lifestyle, including exercise, nutrition and methods of dealing with stress and disease; the recognition of symptoms of maladjustment and / or inability to cope with pathological or socio-environmental problems that may require consultation of qualified practitioners in the psychological field; elementary cognitive-behavioral interventions useful to improve adherence to motor activity programs and perseverance in their continuation; educational, communicative and psycho-motor methodologies and techniques addressed to disabled people, children, adults, the elderly and those who need assistance and social and civil rehabilitation.

Summary of the technical report of the evaluation team

The “NUCLEO” has reviewed the documentation prepared by the PAQ, in particular the minutes of the DMMT and the Consultation with the local organizations, the report for the Comitato Lombardo di Coordinamento Universitario, the draft SUA-CdS with the educational objectives and the table with the provision of teaching coverage preliminarily calculated according to the new indications of Ministerial Decree 1049/2013.

It is clear from the available documentation that the new institution proposal is fully integrated into the strategic development plan of the University, called Health&Wealth@uniBS and that this proposal has garnered the approval of the interested parties even if, due to the very tight deadlines which have to be respected in order to present the institution application the interested parties have been urgently convened and without the possibility to carry out in-depth analysis of disciplinary and generic expected learning outcomes. It is also noted that the motivations that led to the proposed activation of the new master's degree course have been clearly stated, despite the presence of another course in the same class, as well as the relevance and originality of the proposal within the regional educational and professional offer.

The “NUCLEO”, after extensive discussion and based on the documentation presented today, considering the strategic relevance of the new Educational project for the University and its foreseeable sustainability, expresses a preliminary favorable opinion to the establishment of the proposed new Master's Degree course proposed by the DMMT "Science and Technology for

Population Health and Wealth" as regards the fulfillments required for the insertion of the new educational proposal in the MIUR database by 05.02.2014.

Report of the evaluation team for accreditation

See Attachment

Summary of the consultation with the representative local organizations of production, services, professions

See Attachment

On January 27, 2014, at 10.15 am, at the Sala Conciliare of the Faculty of Medicine and Surgery of the University of Brescia, Viale Europa, 11 a meeting was held with the social parties convened by the Rector

Persons who intervened at the meeting: the delegate of the Prefect of Brescia, Deputy Prefect Dott.ssa Gabriella Mucci,

the delegate of the President APINDUSTRIA of Brescia, Mr. Roberto Zanolini,

the delegate of the President of FMSI of Milan, Dr. Daniel di Mattia,

the President of CUS Brescia, Mr. Artemio Carra

the General Secretary SNALSCONFSAL of Brescia, Mr. Mario Soldato,

the President of the Faculty of Medicine and Surgery, Prof. Stefano Maria Magrini,

the Director of the Department of Molecular and Translational Medicine, Prof. Silvano Sozzani,

the Rector of the University of Brescia, Prof. Sergio Pecorelli

the Director of the Department of Molecular and Translational Medicine explains the reasons that made it necessary to convene the social parties: the establishment of a new Master's Degree in Sciences and Technologies for Population Health and Wellness Science and Technology for Population Health and Wealth Master’s degree LM-67 belonging to his department. The activation of a new degree course with which it intends to expand the Educational offer, may seem, nowadays, in contrast, but this initiative falls within the new Athenaeum guidelines which want to focus on the Health and Wealth topics, also reflecting the provisions of one of the themes of the European HORIZON 2020 Program aimed at improving health and well-being throughout life.

In this regard, the Degree Course will be delivered in English to better position itself at the European level and attract foreign students, thus strengthening the process of internationalization pursued by the University thanks to the intervention of teachers called from abroad. It then proceeds to a comparison analysis between the Educational offer of the new degree course and the Master's degree course in Sciences and techniques of preventive and adapted motor activities

already active for a few years, illustrating the differences in the distribution of the CFU related to the SSDs foreseen in the RAD, but also the introduction of more transversal skills of these graduates on the four macro-areas present in our University. It also illustrates the ISTAT professional outlets. The Rector intervenes to reiterate the need to launch an educational programme linked to the new University theme: Health, Wellbeing and the Environment, specifying that the intent is to create a new figure that has a real culture of well-being but open on one side to new technologies and on the other hand to help the system be more sustainable. The Director of the Department gives the floor to the President of CUS Brescia who, appreciating the new Educational offer proposed, underlines how the use of new technological equipment is essential for these objectives to be attainable and asks, in fact, if the new degree course will have new instruments available. The Rector replies by informing that accurate Business Plans have already been prepared and that it is the University's intention to participate in the HORIZON 2020 Project which could provide additional funding. He also informed that public and private bodies have been involved, as well as the MIUR and Ministry of Health with which some ten-year program agreements were signed.

pursuing this path by further investing in research in the biomedical field.

The Director then gives the floor to the delegate of the Federazione Italiana Medico Sportiva who expresses a strong appreciation for the initiative as it increasingly emerges the need to have qualified graduates in respect of health and well-being able to sensitize citizens not only on the importance of prevention but also, for example, on the risk reduction in the performance of various sports. The Rector and the Department Director thank the attendees for the interventions made and, at the end of the meeting, the social parties unanimously express their positive opinion.

Summary of the opinion of the regional coordination committee

See Attachment

On January 30, 2014 at 11 am in a room of the Rectorate of the University of Bergamo, the Lombard University Coordinating Committee meets on the discussion of item 2. on the agenda: "Opinions on new initiatives "at the end of the presentation of the projects, the Committee, having taken note of what has been illustrated by the Rector of the University of Brescia, as well as the Director of the Department of Molecular and Translational Medicine, expresses a favorable opinion regarding the institution, in the LM class. -67 of the Master's Degree Program entitled "Science and Technology for Population Health and Wealth", to be given entirely in English.

Specific educational objectives of the course and description of the educational path

The course aims to provide students with knowledge and skills related to innovative concepts of prevention and maintenance of a state of good health in a society characterized by the continuous increase in the average age of the population through knowledge of new strategies and technological methodologies related to exercise, rehabilitation and nutrition, in order to promote healthy lifestyles. The course, therefore, is aimed at the acquisition of theoretical and technical-practical knowledge necessary to understand the mechanisms underlying the development of the main multifactorial chronic diseases, which characterize an aging society, with specific attention to physical exercise, rehabilitation and a correct nutritional strategy.

Furthermore, the qualifying element of the educational path is the development of knowledge to promote greater awareness in the use of technical equipment to support the evaluation and/or monitoring of the state of health. The training will then be integrated with basic knowledge of the main techniques related to diagnostic instrumentation and sensors for the measurement of biomedical signals, information technology for processing and archiving (also in relation to the current legislation concerning the processing of sensitive data) biomedical signals as well as specific knowledge on rehabilitation systems and their most recent developments.

Finally, biotechnological issues related to emerging areas will be addressed in the study of genetics (genetic risk factors), metabolism (metabolomics), relationship with the bacterial flora commensal (microbiome) and food safety.

On this basis the specific and characterizing skills will primarily have to concern:

- knowledge of functional modifications and adaptations deriving from physical exercise inserted into a correct lifestyle and methods of evaluation of the state of physical efficiency and planning of exercise and nutrition;
- the promotion, monitoring, management and maintenance of a correct lifestyle (i.e. the best conditions of psychophysical, motor and nutritional well-being), in subjects in different health and illness conditions, with attention to gender specificity;
- the planning, organization, planning and implementation of integrated motor activity programs, aimed at achieving, recovering and maintaining the best physical and mental health benefits, for the improvement of the health and well-being of the population;
- knowledge of multi-level interactions on physical activity, on food quality and ultimately on health;
- collaboration in the development of new technologies applied to the welfare sciences;
- planning, coordination and evaluation of voluntary and assisted motor activities through advanced technologies also in relation to the environment in which the subjects usually live and work;

- the ability to use the English language in professional implementation in Italy and abroad in the context of issues related to the health and welfare of the population. These objectives are achieved through lectures and also at seminars and meetings with national and international experts. To this end, the course will also avail itself of the assistance of foreign teachers who will be recruited as Visiting Professors in the framework of the internationalization program active at the University. The course will be organized in such a way as to reserve 20 CFU for internship activities to be carried out in University research laboratories and / or in specially identified suitable approved facilities. In addition, credits will be reserved for the preparation of the final exam and for activities chosen by the student, for which maximum freedom of choice will be left to the students among the courses active at the University (Article 10, paragraph 5, letter a).

Expected learning outcomes, expressed through the European descriptors of the qualification (DM 16/03/2007, article 3, paragraph 7)

Knowledge and understanding skills

Master's graduates acquire in-depth knowledge in the areas of motor, rehabilitative, nutritional and biotechnological sciences with reference to content aimed to design and analyze interventions oriented to improve the well-being and health of the aging population. In addition, graduates will be able to interface with field specialists to carry out basic and applied research.

The acquisition of these results will be favored, monitored and evaluated by means of quantitative and qualitative assessment tools during the examination of the various integrated courses according to the methods indicated by the Board of the CdSM.

Abilty to apply knowledge and understanding

Master’s Graduates can apply the acquired knowledge in order to design and implement specific interventions, with elements of innovation, addressed to improving the well-being and health of the population in reference to motor, rehabilitative and nutritional aspects.

To achieve this result, students will be encouraged to apply the knowledge acquired during the course of study, in an internship. These skills will be verified by the tutor and the reference teacher and will be implemented in the preparation of their thesis.

Making judgments

Graduates can evaluate:

1. the presence of sufficient evidence to justify or advise the use of specific, new physical or nutritional methods to improve the well-being and health of the population and their socio-economic impact in the scientific literature.
2. the risks and benefits of specific interventions aimed at improving the well being and health of the population based on integrated motor and nutritional activity programs.
3. the risks and benefits of specific interventions aimed at improving the well being and health of the population based on primary and secondary pharmacological prevention strategies, also in relation to physical exercise.
4. the impact of new technologies applied to welfare sciences.
5. the adequacy of the structures in which to apply the proposed interventions.

These objectives will be pursued by encouraging the active participation of students and their ability to work independently during the whole educational process. The maturation of these skills will be verified during the planned theoretical / practical training under the supervision of the tutor and the reference teacher. The evaluation of the achieved autonomy of judgment will be formulated by the reference teacher based on the report of the traineeship presented by the student.

Communication skills

Masters graduates know how to:

1. transmit information about the intervention protocols to be applied in a clear and comprehensive way to their collaborators
2. properly inform the target people of their interventions
3. synthesize the acquired knowledge and present the state of the art in the respective fields of activity
4. use the appropriate technical language with great care and precision.

communication skills will be developed within all the material of the course of study through the preparation and presentation by the students of English-language reports related to the course in question. These reports will be presented in the classroom in the presence of the reference teacher who will stimulate the group interaction skills with the other students and will evaluate the level reached, suggesting possible improvements where appropriate. The dissertation of the degree thesis will represent the final verification of the candidate's communication skills.

Learning skills

Graduates have the capacity to continue independently to develop their knowledge and skills, in light of the continuous evolution of scientific knowledge in the fields in question.

The verification of knowledge and comprehension skills will be carried out in an organic way within the framework of all the proficiency assessments envisaged in the course of study: exams, written and oral, in which both the theoretical preparation and the processing capacity, including design, will be evaluated in regards particularly to the ability to comprehend, a privileged moment, both of maturation and verification, will consist of a close discussion with the teacher during the preparation of the master's degree thesis.

Knowledge Entry requirements

(DM 270/04, art 6, paragraph 1 and 2)

The Master's degree program in Exercise, Rehabilitation and Nutrition in an Aging Society is a “numerus clausus” according to the law 264/1999. The maximum number of students enrolled per year of study is related to the actual availability of suitable teaching, technical and scientific facilities and equipment. Access is subject to possession of a Bachelor’s Graduate Diploma in classes L-22, L / SNT01, L / SNT02, L / SNT03 or L / SNT04 or other equivalent qualifications obtained abroad. In addition, to access the study program, a level of English proficiency equal to or higher than Council of Europe (CEFR) B2 is required, that is to say that the degree has been obtained in English or acquired in the curriculum. A university knowledge of English equal to or higher than level B2 or be candidates from English-speaking countries.

The curricular requirements will be verified through the analysis of the candidate's curriculum vitae by a specific Commission nominated by the Dean’s Decree. The personal preparation will be verified, pursuant to art. 6, paragraph 2, of Ministerial Decree 270/04, as established by the Teaching Regulations of the course of study. The adequate knowledge of the English language will have to be verified and will be an integral part of the evaluation. The access of students coming from non-EU countries is subject to current regulations.

Characteristics of the final examination (DM 270/04, Article 11, paragraph 3-d)

The final exam consists of the preparation, presentation and discussion of a thesis, elaborated by the student in an original way under the guidance of a lecturer, in which the results of an experimental activity or research of scientific literature are presented. The presentation takes place in front of a committee of professors composed according to the provisions of the Didactic Regulations of the course of study.

Reasons of establishing multiple courses in the class

At the University of Brescia the CdSM Sciences and techniques of preventive and adapted motor activities, also belonging to the LM-67 class, is currently set up in order to train master's graduates to be able to design and manage motor activities with particular reference to elderly, disabled or chronic illnesses. The orientation of this CdSM is strongly directed towards the acquisition of significant clinical skills, calculated on the need to make available to the Regional Health Systems of specialist graduates who, in case of pathological situations requiring administration of exercise as therapy, also in Intra-hospital settings may be non-medical practitioners, but with basic clinical training, able to administer the prescribed dosage of doctors to patients. The present CdSM of the same class, whose characteristics and objectives are best highlighted with the new name of CdSM in Exercise, Rehabilitation and Nutrition in an Aging Society, joins the co-existing one, proposing to provide graduates with a different educational path, more suited to the training of operators active in the territory in the context of not only the prevention of chronic-degenerative diseases, but in a broad sense in the context of control and slowing of the phenomenon of functional deterioration associated with aging. The graduates of this CdSM will acquire knowledge and skills concerning in particular innovative concepts of prevention, methodology and application of correct lifestyles, with attention focused on the practice of physical exercise, motor and rehabilitation support and adequate nutritional practice in a aging society. To this end, in this CdSM graduates will acquire not only extensive knowledge in the areas of motor sciences, but also in the biotechnological, nutritional and rehabilitative sciences, with reference to the contents aimed at designing and analyzing interventions aimed at improving wellbeing. and the health of the entire population. In this regard, the CdSM will be delivered in English, to better position itself at the European level and attract foreign students, thus strengthening the process of internationalization pursued by the University. Through the two CdSMs, the Athenaeum of Brescia University therefore proposes to train operators on the two supporting axes, one in which the exercise is considered for its uses in the field of therapy and prevention tertiary, the other (covered by this course) in which the exercise, associated with the practice of correct lifestyles, is applied in a context of primary and secondary prevention.

Function in a work context:

Master'Graduates could mainly focus on carrying out activities related to the planning and technical coordination of locomotor programs, possibly with nutritional implications, as well as the organization and implementation of primary prevention programs at public entities or consortia of public bodies, private and public structures for the elderly, public and private structures to support people with ambulatory problems, public or private structures active in the field of well-being (including wellness centers associated with hotels, wellness and spa facilities), detention and rehabilitation facilities, voluntary associations and non- profit associations, that is to assume the role (independent or assisting health personnel) of managers and operators of structures and / or services aimed at promoting and maintaining population's well-being and correct lifestyles.

Skills associated to the function:

The activity of these Master's degree graduates will include integrated interventions in the field of physical exercise with regards to motor activity (with reference to various evolutionary phases, sports, the contrast of sedentariness and physical hypoactivity in chronic diseases, the recovery due to trauma or acute diseases), in order to pursue an improvement in the quality and lifestyles and wellbeing of the population which also includes fundamental rehabilitative and nutritional aspects. The ability to use the English language in the professional implementation within the themes related to health and well-being of the population will represent an additional characterizing skill.

Employment opportunities:

Because the Master's degree in Exercise, Rehabilitation and Nutrition in an Aging Society is provided in English, graduates will be able to more easily access professional opportunities of the possible professional three-year degree course of origin, and have better recognition in the labor market.

Furthermore, it is possible to identify outlets in the field of intellectual, scientific and highly specialized professions, with specific reference to training and research specialists and specialists in the life sciences, in public and private structures operating in the field of health and well-being of the population, and also training.

Academic preparation for the profession of (According to the ISTAT codes – Italian Institute of Statistics)

- Researchers and graduated technicians in Medical Sciences (2.6.2.2.3)

The Rector declares that in the drafting of the educational regulations of the Course the present course and its possible curricula will differ at least 30 credits from the same class other courses and curricula, pursuant to Ministerial Decree 16/3/2007, art. 1 §2.

Attività caratterizzanti

ambito disciplinare	settore	CFU min	CFU max	minimo da D.M. per l'ambito
Discipline motorie e sportive	M-EDF/01 Metodi e didattiche delle attivita' motorie M-EDF/02 Metodi e didattiche delle attivita' sportive	20	20	**20**
Biomedico	BIO/09 Fisiologia BIO/10 Biochimica BIO/12 Biochimica clinica e biologia molecolare clinica BIO/14 Farmacologia BIO/16 Anatomia umana BIO/17 Istologia MED/04 Patologia generale MED/09 Medicina interna MED/10 Malattie dell'apparato respiratorio MED/11 Malattie dell'apparato cardiovascolare MED/13 Endocrinologia MED/26 Neurologia MED/33 Malattie apparato locomotore MED/34 Medicina fisica e riabilitativa MED/39 Neuropsichiatria infantile MED/42 Igiene generale e applicata	30	34	**16**
Psicologico pedagogico	M-PED/01 Pedagogia generale e sociale M-PED/03 Didattica e pedagogia speciale M-PED/04 Pedagogia sperimentale M-PSI/04 Psicologia dello sviluppo e psicologia dell'educazione M-PSI/05 Psicologia sociale M-PSI/06 Psicologia del lavoro e delle organizzazioni	7	7	**7**
Sociologico	SPS/08 Sociologia dei processi culturali e comunicativi SPS/10 Sociologia dell'ambiente e del territorio	5	5	**5**
	Minimo di crediti riservati dall'ateneo minimo da D.M. 48:	62		

Totale Attività Caratterizzanti	62 - 66

Attività affini

ambito: Attività formative affini o integrative		CFU	
	intervallo di crediti da assegnarsi complessivamente all'attività **(minimo da D.M. 12)**	20	26
A11	CHIM/07 - Fondamenti chimici delle tecnologie ING-IND/13 - Meccanica applicata alle macchine ING-IND/34 - Bioingegneria industriale ING-INF/01 - Elettronica ING-INF/05 - Sistemi di elaborazione delle informazioni ING-INF/06 - Bioingegneria elettronica e informatica ING-INF/07 - Misure elettriche e elettroniche	6	8
A12	AGR/11 - Entomologia generale e applicata AGR/12 - Patologia vegetale AGR/15 - Scienze e tecnologie alimentari BIO/11 - Biologia molecolare CHIM/10 - Chimica degli alimenti MED/01 - Statistica medica MED/03 - Genetica medica MED/05 - Patologia clinica MED/07 - Microbiologia e microbiologia clinica MED/16 - Reumatologia MED/49 - Scienze tecniche dietetiche applicate	14	18

Totale Attività Affini	20 - 26

Altre attività

ambito disciplinare		CFU min	CFU max
A scelta dello studente		8	8
Per la prova finale		3	10
Ulteriori attività formative (art. 10, comma 5, lettera d)	Ulteriori conoscenze linguistiche	-	-
	Abilità informatiche e telematiche	-	-
	Tirocini formativi e di orientamento	20	20
	Altre conoscenze utili per l'inserimento nel mondo del lavoro	-	-
Minimo di crediti riservati dall'ateneo alle Attività art. 10, comma 5 lett. d			
Per stages e tirocini presso imprese, enti pubblici o privati, ordini professionali		-	-

Totale Altre Attività	31 - 38

Riepilogo CFU

CFU totali per il conseguimento del titolo	**120**
Range CFU totali del corso	113 - 130

Reasons for the inclusion in related sector activities envisaged by the class or related activities

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The course aims to provide in-depth knowledge in the emerging sectors of life sciences and lifestyles aimed at improving the well-being of the population. This knowledge includes the basic concepts of bioengineering sciences in the field of sensors and the development and use of motor prostheses, as well as innovative aspects of the agri-food sciences, referring for example to food with animal and vegetable origin. This knowledge is accompanied by in-depth studies of the biomedical sciences related to the emerging areas in the study of genetics (genetic risk factors), metabolism (metabolomics), in relationship with the bacterial flora commensal (microbiome) and food safety including their biostatistical aspects. To this end, the course is characterized by the introduction of similar activities that include disciplines in scientific-disciplinary sectors of the various culturally involved themes.

Notes related to other activities

The other activities consist mainly of training activities, which will take place in the form of both practical activities within the laboratory structures of the University of Brescia included in the training structure of the degree course, and in external structures (companies, centers, public bodies) or individuals) operating under an agreement with the University of Brescia for the degree course in question. The aim is to associate the theoretical teaching activity ex-cathedra with the practical knowledge that derives from it, directing the student's education towards a more complete professionalism. Within an offer prepared by the Consiglio di Corso di Laurea, the student proposes an internship plan for the requested credits, which must be approved by the Consiglio di Corso di Laurea. The other activities also include the student's free choice credits, which may be acquired either by attending courses in other Degree Courses present in the Educational offer of the University of Brescia (also in Italian) of similar subjects, although not provided for of the Master's Degree Program in question, and/or attending other formative or seminar activities present in the Athenaeum 's Educational offer.

Notes on the characterizing activities

The characterizing activities correspond to the provisions of the annex to the declaration of the Degree Class.

RAD closed on 15/05/2018