



REPUBBLICA ITALIANA
UNIVERSITÀ DI PISA

NOI MAGNIFICO RETTORE

Prof. Massimo Mario Augello

VISTO LO STATUTO E IL REGOLAMENTO DIDATTICO DI ATENEIO
VISTI GLI STUDI COMPIUTI
VISTO IL RISULTATO DELLA PROVA FINALE SUPERATA IL 20 OTTOBRE 2015
IN NOME DELLA LEGGE CONFERIAMO
A

Giovanni Tannelli

NATO A BOLZANO (BZ) IL 12 AGOSTO 1992

LA LAUREA E LA QUALIFICA ACCADEMICA DI DOTTORE IN

FISICA

(CLASSE DELLE LAUREE IN SCIENZE E TECNOLOGIE FISICHE)

IL PRESENTE DIPLOMA VIENE RILASCIATO
A TUTTI GLI EFFETTI DI LEGGE.
DIPLOMA N. 299360

PISA, 11 NOVEMBRE 2015

IL RETTORE

M. Augello





Diploma supplement

Issued to GIOVANNI IANNELLI

born in Bolzano (BZ) - (Italy)

on 12/08/1992

Diploma supplement
English version from page



Diploma Supplement

The Diploma Supplement was developed by the European Commission, Council of Europe and by UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international transparency and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It is free from any value-judgements, equivalence statements or suggestions about recognition. Information is provided in eight sections. Where information is not provided, an explanation will give the reason why.

1. Information identifying the holder of the qualification

1.1 Family name(s)
IANNELLI

1.2 Given name(s)
GIOVANNI

1.3 Date (dd/mm/yyyy)
12/08/1992

1.4 Student identification number or code
476623

grade respectively. A 'cum laude' can be added to the maximum grade as a special distinction.

4.5 Overall classification of the qualification (in original language)

103/ 110, obtained in date 20/10/2015.

The overall classification of the qualification is graded on a scale from 1 to 110, with 66 and 110 as minimum and maximum grade respectively. A 'cum laude' can be added to the maximum grade as a special distinction

2. Information identifying the qualification

2.1 Name of the qualification and (if applicable) title conferred (in original language):
Laurea in Fisica. The holder of this qualification has the right to the title of "Dottore/Dottoressa in Fisica"
"Dottore"

2.2 Main field(s) of study for the qualification
Physics - L-30

2.3 Name and status of awarding institution (in original language):
Università di Pisa
Public University
Head Office: Lungarno Pacinotti, 43/44 PISA

2.4 Name and status of Institution (if different from 2.3) administering studies (in original language):
Not applicable

2.5 Language(s) of instruction/examination
ITALIAN

7. Certification of the supplement

7.1 Date (dd/mm/yyyy)
18/03/2016

7.2 Name and signature
Dott. Luigi RIVETTI

Document issued according to article 3 paragraph 2 of the government decree February 12th, 1993, no. 39

7.3 Capacity

Manager of the Office

7.4 Official stamp or seal

3. Information on the level of the qualification

3.1 Level of qualification
1° cycle

3.2 Official length of programme
Three years (180 credits are required in order to graduate)

3.3 Access requirement(s)
Upper Secondary School diploma (State Exam) or equivalent foreign qualification (admission and enrolment)

4. Information on the contents and results gained

4.1 Mode of study
Full time

4.2 Programme requirements

The course is for three-year and involves the acquisition of 180 credits. Each academic year provides for the acquisition of approximately 60 credits.

4.3 Programme details (e.g. modules or units studied) and the individual grades/marks/credits obtained

See table on next page

4.4 Grading scheme and, if available, grade distribution guidance

Individual subjects are graded on a scale from 1 to 30, with 18 and 30 as minimum and maximum



4.3 Programme details (e.g modules or units studied) and the individual grades/marks/credits obtained

Date	Didactic activity	CFU/ECTS credits	Mark	Val./Rec
29/05/2012	LANGUAGE SKILLS	3	Excellent	
06/06/2012	LABORATORY 1	12	27	
11/06/2012	PHYSICS I	15	30	
12/09/2012	MATHEMATICAL ANALYSIS 1 AND 2	15	24	
01/02/2013	MATHEMATICAL ANALYSIS 3	6	23	
01/07/2013	COMPUTER SCIENCE	6	29	
18/07/2013	LABORATORY 2	12	28	
16/09/2013	LINEAR ALGEBRA	9	24	
11/02/2014	MATHEMATICAL METHODS I	6	26	
27/06/2014	PHYSICS LABORATORY 3	12	28	
11/09/2014	STRUCTURE OF MATTER	6	28	
16/09/2014	CLASSICAL MECHANICS	12	24	
16/01/2015	MATHEMATICAL METHODS II	6	29	
06/02/2015	PHYSICS 2	15	24	
14/07/2015	QUANTUM MECHANICS	12	23	
08/09/2015	GENERAL CHEMISTRY	6	21	
24/09/2015	PHYSICS 3	12	27	
28/09/2015	MONTECARLO METHODS IN EXPERIMENTAL PHYSICS	6	30	
05/10/2015	ELEMENTS OF THE PHYSICS HISTORY	6	30	
20/10/2015	FINAL EXAM	3	Passed	

Legend	
CFU	Credits



8. Information on the national higher education system

The Italian University System

Since 1999, Italian university studies have been fully reformed so as to meet the objectives of the "Bologna process". The university system is now organised on 3 cycles: the 1st cycle academic degree, that is the Laurea, grants access to the 2nd cycle, and the Laurea Specialistica/Magistrale, the main degree of the 2nd cycle, gives access to 3rd cycle doctorate programmes resulting in the degree called Dottorato di Ricerca. In addition to the mentioned degree sequence after the Bologna pattern, the system offers other degree programmes and related degrees both within the 2nd and 3rd cycle.

First cycle. This cycle consists exclusively of Corsi di Laurea. These degree programmes provide students with an adequate command of general scientific methods and contents as well as with specific professional skills. The general access requirement is the Italian school leaving qualification awarded after completion of 13 years of schooling and passing the relevant State examination; comparable foreign qualifications may also be accepted. Admission to some degree courses may be based on specific course requirements. The studies last 3 years. The Laurea is awarded to students who have gained 180 ECTS credits (called Crediti Formativi Universitari - CFU) and satisfied all curricular requirements, including the production of a final written paper or equivalent final project. The Laurea gives access to the Corsi di Laurea Magistrale as well as to other 2nd cycle study programmes.

Second cycle. The main degree programmes in this cycle are the Corsi di Laurea Magistrale. They provide education at an advanced level for the exercise of highly qualified activities in specific areas. Access is by a Laurea degree or a comparable foreign degree; admission is based on specific course requirements determined by single universities. The studies last 2 years. The Laurea Magistrale degree is awarded to students who have gained 120 ECTS/CFU credits and satisfied all curricular requirements, including the production and public defence of an original dissertation. Some programmes (namely, those in dentistry, medicine, veterinary medicine, pharmacy, architecture, construction engineering/architecture, law, primary education) are defined "single cycle programmes" (Corsi a ciclo unico); for these programmes access is by the Italian school leaving qualification (or a comparable foreign qualification); admission is based on entrance exams. The studies last 5 years (6 years and 360 ECTS/CFU credits in the cases of medicine and dentistry). A Laurea Magistrale degree is awarded to students who have gained 300 ECTS/CFU credits and satisfied all curricular requirements, including the production and public defence of an original dissertation. A Laurea Magistrale degree gives access to Corsi di Dottorato di Ricerca as well as to other 3rd cycle study programmes.

Third cycle. The main degree programmes in this cycle are Corsi di Dottorato di Ricerca (research doctorate programmes); the students/young researchers enrolled in these programmes will acquire methodologies for advanced scientific research, will be trained in new technologies and will work in research laboratories, wherever appropriate. Access is by a Laurea Magistrale degree (or a comparable foreign degree); admission is based on a competitive exam; studies last at least three years and include the completion and public defence of an original research project.

Other programmes.

- Corsi di Specializzazione. These are 3rd cycle programmes intended to provide students with the knowledge and skills required for the practice of highly qualified professions, mainly in medical, clinical and surgical specialities. Admission is by a Laurea Magistrale degree (or by a comparable foreign degree) and is based on a competitive exam; studies may last from 2 (120 ECTS/CFU credits) to 6 years (360 ECTS/CFU credits) depending on the discipline. The final degree awarded is a Diploma di Specializzazione.

- Corsi di Master Universitario di primo livello These are 2nd cycle programmes intended to provide

students with further specialization or higher continuing education after completion of the first cycle. Access is by a Laurea degree (or a comparable foreign degree); admission may be subject to additional requirements. Studies last at least 1 year (60 ECTS/CFU credits). The qualification awarded (Master Universitario di primo livello) does not give access to Corsi di Dottorato di Ricerca or to any other 3rd cycle programme since this type of course does not belong to the general requirements established at national level, but it is offered under the autonomous responsibility of each university.

- Corsi di Master Universitario di secondo livello These are 3rd cycle programmes intended to provide students with further specialization or higher continuing education studies after completion of the second cycle. Access is by a Laurea Magistrale degree (or a comparable foreign degree); admission may be subject to additional requirements. Studies last at least 1 year (60 ECTS/CFU credits). The qualification awarded (Master Universitario di secondo livello) does not give access to Corsi di Dottorato di Ricerca or to any other 3rd cycle programmes, since this type of course does not belong to the general requirements established at national level, but it is offered under the autonomous responsibility of each university.

Credits: degree courses are structured in credits (Crediti Formativi Universitari - CFU). University credits are based on the workload students need in order to achieve the expected learning outcomes. Each credit corresponds to 25 hours of student workload, including independent study. The average workload of a full time student is conventionally fixed at 60 credits per year. Thus, the CFU fully coincide with ECTS credits.

Classes of Degree Courses: all degree programmes of Laurea and Laurea Magistrale sharing general educational objectives are grouped into "classes". In developing the specific learning outcomes of single programmes, Universities have to comply with some national requirements for each class concerning the types (and corresponding amount of credits) of teaching learning activities to be included. Degrees belonging to the same class have the same legal value.

Academic Titles: Those who receive the Laurea are entitled to be called "Dottore", the holders of a Laurea Magistrale have a right to the title of "Dottore Magistrale", the Dottorato di ricerca confers the title of "Dottore di Ricerca" or "PhD".

Joint Degrees: Italian universities are allowed to establish degree programmes in cooperation with Italian and foreign partner universities, on completion of which joint or double/multiple degrees can be awarded.

Further information: Italian Qualifications Framework

Quadro dei Titoli Italiani - QTI

<http://www.quadrodeititoli.it>

