Science and Management of Climate Change.
Fifth Master Edition // 38th PhD cycle
Welcome!
STUDY PLAN 2022-2023

1ST TERM (36 CFUs)
• FOUNDATIONS

2ND TERM (36 CFUs)
• CLIMATE ECONOMICS AND FINANCE
• CLIMATE MODELLING AND IMPACT ASSESSMENT

MASTER’S STUDENTS
• INTERNSHIP (250 HOURS, 10 CFU+2 CFU FINAL REPORT)
1. FOUNDATIONS

1. MATHEMATICAL MODELLING & PROGRAMMING
2. INTRODUCTION TO PROGRAMMING FOR STATISTICS & MACHINE LEARNING
3. ECONOMETRICS AND MACHINE LEARNING
4. CLIMATE DYNAMICS
5. ENVIRONMENTAL AND CLIMATE CHANGE ECONOMICS
6. CLIMATE OF THE PAST
2. CLIMATE ECONOMICS AND FINANCE

1. Decision theory and multi-criteria analysis
2. CGE and integrated assessment modelling
3. Applied environmental economics and policy evaluation
4. Domestic and international climate policies
5. Climate finance
6. Energy systems & technologies
3. CLIMATE MODELLING AND IMPACT ASSESSMENT

1. Adaptive Management of Natural Resources and Agricultural Systems

2. Risk Assessment and Decision Support System for Environmental Impacts of Climate Change

3. Chemodynamics, Climate Change and Environmental Quality

4. Climate Modelling and Monitoring

5. Climate Damage Modelling and Assessment

6. Energy Systems and Technologies
1. LABS – DATA, TOOLS AND METHODS FOR EARTH SCIENCES – INTRODUCTION (OPTIONAL)

2. LABS – DATA, TOOLS AND METHODS FOR EARTH SCIENCES – PRACTICALS (OPTIONAL)

3. LABS – ENVIRONMENTAL DIPLOMACY (OPTIONAL)

STUDENTS CAN CHOOSE - 1 TO 3 LABS
ESSENTIAL INFOs

TWO TERMS
19/09/2022 – 21/12/2022
16/01/2023 – 31/05/2023

DETAILS AND UPDATES
http://www.unive.it/data/7886/

HOW TO SURVIVE AND THRIVE
✓ **SURVIVAL KIT**
✓ **PHD-CLIMATE-CHANGE@UNIVE.IT**
✓ **ENRICA.DECIAN@UNIVE.IT**
✓ **WILMER.PASUT@UNIVE.IT**
1st year REQUIREMENTS

ATTENDANCE TO COURSES IS MANDATORY. AT LEAST 80% OF LECTURES FOR EACH COURSE.

TO GAIN ADMISSION TO THE 2ND YEAR:

✓ PASS ALL THE EXAMS
✓ ATTEND AT LEAST 1 SEMINAR PER MONTH (CMCC/DAIS/DEC)
SUPERVISORS

BAGNARA ELENA – ROVERE/ZANCHETTIN
CAMPUS LORENZO – TEGLIO/BATTISTON
DEBERGH REINOUT – DI CORATO/BATTISON
DENTICO CARLOTTA – RUBINO/CIVITARESE
JASUJA GARIMA – BOSELLO/DASGUPTA
SAMVURA MOTSI LUCY – DE CIAN/ MERCOGLIANO

CONFIRM OR CHANGE SUPERVISOR BY MAY 2023
2nd/3rd/4th-year REQUIREMENTS

- Progress in Research
- At least 20 Seminars/year (CMCC, DAIS, DEC)
- Research period abroad
- Attendance of Workshops, Conferences, Paper/Poster Presentations
- Attendance of 2 of the Interdisciplinary Courses organized by the PhD Office (http://www.unive.it/pag/7726/)
# Monitoring

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<th>Month</th>
<th>38th cycle 1st year students</th>
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<th>36th cycle 3rd year students</th>
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<td>2nd term courses</td>
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<td>JULY 23</td>
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<td>SUMMER PRESENTATION</td>
<td>THESIS PREDENF</td>
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<td>ADMISSION TO THE 4 YEAR</td>
<td>ADMISSION FINAL EXAM</td>
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- ✔ SUMMER MONITORING SESSION
- ✔ AN EXTRA MONITORING SESSION CAN BE ARRANGED BEFORE CHRISTMAS UPON STUDENTS’ REQUEST
INTERNATIONAL OPPORTUNITIES

✓ FROM THE SECOND YEAR: AT LEAST 6 MONTHS ABROAD

✓ CO-TUTORSHIP: You can spend half of the PhD program in a foreign institution, develop and defend your thesis under the joint supervision of two professors from two universities, and in some cases be awarded a double PhD title => apply within 18 months from the start

✓ DOCTOR EUROPÆUS: This designation can be added to a national doctorate, if four conditions (see survival kit) are met => apply within 18 months from the start
OTHER USEFUL INFOs

✓ **10% FUND**: AVAILABLE FROM THE 1° YEAR, IT CUMULATES OVER TIME, CHECK SURVIVAL KIT FOR LIST OF ELIGIBLE EXPENSES

✓ **Teaching**: NOT MANDATORY BUT STRONGLY RECOMMENDED — PAID AND UNPAID OPPORTUNITIES

✓ **ARCA Publication Archive**: TO INCLUDE YOUR PUBLICATIONS IN THE UNIVERSITY RESEARCH PUBLICATION CATALOGUE

✓ **Study Rooms**: San Giobbe Economics Campus, CMCC@Ca’Foscari, located in the VEGA Science Park, Marghera, Venice
Welcome and enjoy this journey!
Climate resilience: a change within a given cup (system)

Transformative change: a change in the shape of the cup

A journey investigating the transition from CR to TCR

Steffen et al. 2016
1. Energy
2. Information
3. Collective agency

A journey investigating the transition from CR to TCR
REFERENCES

SIMON L. LEWIS & MARK A. MASLIN

The Human Planet
HOW WE CREATED THE ANTHROPOCENE

DALE JAMIESON

REASON IN A DARK TIME
WHY THE STRUGGLE AGAINST CLIMATE CHANGE FAILED--AND WHAT IT MEANS FOR OUR FUTURE