



university of  
 groningen

campus fryslân



University College Fryslân

# BSc Global Responsibility & Leadership



Study guide 2019 – 2020

# Introduction to the programme



## Welcome!

The Bachelor of Science degree in Global Responsibility and Leadership (GRL) is an initiative developed by the University of Groningen at Campus Fryslân, the Netherlands. The GRL programme is a scientifically rigorous, inter- and transdisciplinary programme dedicated to addressing global challenges and finding local solutions. The programme is inspired by the 2030 UN Agenda for Sustainable Development and consists of input from Human and Social Sciences, Natural Sciences and Information Technology. The programme is housed at University College Fryslân (UCF), in Leeuwarden.

Today's challenges reflect the dynamic and complex state of world affairs and cut across various academic disciplines. Solutions for these 'wicked problems' can no longer come from isolated improvements in one single area. They can only be addressed jointly by government, industry, civil society and academia. Sustainable, future-proof solutions require innovations by change agents and leaders educated in methods of transdisciplinary research. This is what the GRL degree will offer you.

In this study guide you will find information on our educational concept, the curriculum, an example of a weekly schedule and all the course descriptions. On the last page you will find our contact information, please do not hesitate to use that if you have any further questions.

We look forward to welcoming you in Leeuwarden.

Warm regards,

*The UCF Team*

## Content

Introduction to the programme	2
Educational concept	3
Overview of the curriculum	4
Course descriptions year 1	6
Courses year 2 – 3	16
Unique features: living lab & study abroad	17
Weekly schedule year 1	18
Contact information	19

# Educational concept

The GRL teaching and learning environment is fundamentally learner-focussed and inter- and transdisciplinary learning is supported by the development of academic and personal skills. This is steeped in the American tradition of 'Liberal Education', which is an approach to learning provides students with broad knowledge of the wider world as well as in-depth study in a specific area of interest. Moreover, a liberal education helps students develop a sense of social responsibility (AACU).

The GRL programme emphasises rigorous academic training as well as development of necessary skills, for an increasingly complex and dynamic global society and labour market that is characterised by a process of continuous digitisation, so-called 21st Century skills. In addition, the educational concept is characterised by four features: i) small-scale and intensive learning environment, ii) inter- and transdisciplinary education, iii) leadership and iv) international community.

## Small-scale and intensive learning environment

Our teaching takes place in small-scale workshop-like settings, encompassing active and digital learning in all our classes. We place a large amount of responsibility for the learning process with you: the student. In each year of the programme, classes will not exceed 25 students and attendance is mandatory. Lecturers act as coaches who provide brief instruction, give feedback on student work and stimulate discussion.

## Inter- and transdisciplinary education

Today's 'wicked problems' can no longer be addressed from one single discipline, but require an inter- and transdisciplinary approach. GRL offers you a framework in which to integrate academic knowledge, theories and methods from various disciplines. Moreover, the GRL programme links fundamental knowledge to real world problem solving through collaboration with public and private partners from outside academia.

## Leadership

Leadership for sustainable change requires effective self-reflection and is needed at all levels of society. Throughout the three-year programme, you will show and (self-)assess your progress on your leadership skills and your responsibility as a global citizen. The Leadership Lab will specifically help you develop skills related to self-management, leadership and cultural awareness.

## International community

University College Fryslân is fundamentally international. Students and staff come from different nationalities and backgrounds and the content of all courses has a clear international focus, not in the least because of the origins of the programme in the SDGs. The official campus language is English and the GRL programme is taught exclusively in English. One of our key features is that we are a residential campus. This means that in the first year of your studies, you live together with your fellow students in our student housing in the city centre of Leeuwarden. As such, we aim to build a 'city campus', with the goal of creating an active, enriching and international academic and social community.

# Overview of the curriculum

The GRL programme consists of four main components that need to be fulfilled throughout the three years: the Foundation, the Skills Lab, the Major and the Minor.

## Foundation (35 EC)

The seven courses in the Foundation of the GRL programme address different perspectives on global challenges and offer the domains in which the global-local relationship is negotiated. The Foundation consists of core courses in political science, economics, earth & energy, psychology, global health and Information Technology.

## Skills Lab (35 EC)

The courses in the Skills Lab provide a solid base in academic communication techniques and research methodology. Intercultural communication, collaboration and leadership skills are additionally developed. The Skills Lab consists of core courses in academic communication, language and culture, leadership, and statistics and qualitative methods.

## Major (80 EC)

At the end of your first year, you chose your major and determine your own path throughout the GRL programme. You can opt for one of our three majors: Responsible Governance, Responsible Planet and Responsible Humanity. In addition, you complete one Living Lab project and conclude the degree with your Capstone.

## Living Lab projects

The LL projects entail the transdisciplinary integration of academic and non-academic knowledge with regard to developing sustainable (local) solutions to current global challenges. During the LL projects, you work together with private and public stakeholders and learn how to translate a real-world question into a question suited for academic research, do the research, and then translate your findings back into recommendations for the stakeholder.

## Capstone

You complete the third year with a Capstone project, which is the academic culmination of your degree. The Capstone meets the standards and requirements of (semi-independent) academic research, but does not have to take the form of a traditional thesis. You are encouraged to decide for yourself how to complete your degree and to present the project in a creative way, for example by developing an app, filming a public service announcement, designing a product, writing a policy paper or creating a theatre production.

## Minor (30 EC)

The third year minor gives you the opportunity to individualise your programme even further. Most students will opt for an exchange semester at a university abroad, but you can also use the minor to do an internship or to fulfil pre-master requirements within another Faculty at the University of Groningen or another university in the Netherlands or abroad.

## General course information

All our students are required to take six courses per semester (3 courses per term), each worth 5 EC. In the first year, you take 7 Foundation courses, 3 Skills Lab courses and 2 of your chosen major courses.

After the first year, you chose your Major: Responsible Governance, Responsible Planet or Responsible Humanity. Within your major, you have to complete at least two tracks. A track consists of a 300-level course and at least two other courses (usually prerequisites) in the same field of study.

In the second and third year, you take 1 Foundation course, 3 Skills Lab courses and 1 Ethics course specified to your major. All other courses are courses chosen within (or even outside of) your major.

In the major, courses are offered at three different levels:

- 100-level (introductory): courses have no prerequisites and, unless specified otherwise, are open to all students.
- 200-level (intermediate): courses have prerequisites and are only open to students who have successfully completed one or more courses at 100-level.
- 300-level (advanced): courses have prerequisites and are only open to students who have successfully completed one or more courses at 100 and 200-level.

Figure 1. Schematic overview of the GRL programme

Year 1	Term 1	Politics, Power & International Responsibility	Explaining Human Behaviour	Academic Communication
	Term 2	Principles of Economics	The Earth System	Language & Culture I
	Term 3	Introduction to Global Health	Introduction to Programming	Statistics I
	Term 4	Introduction to Data Science	Major	Major
Year 2	Term 5	Major	Major	Leadership lab
	Term 6	Major	Major specialisation: Ethics & Global Responsibility	Qualitative Methods
	Term 7	Major	Living Lab Project	Language & Culture II
	Term 8	Major		Statistics II
Year 3	Term 9	Minor (for example: semester abroad or pre-master)		
	Term 10	Minor (for example: semester abroad or pre-master)		
	Term 11	Major	Capstone project	Major
	Term 12	Major		Major

## Legend:

Foundation
Skills lab
Major requirements
Major
Minor

# Course descriptions year 1

Title of course	Politics, Power and International Responsibility
Course unit type	Foundation
Course content	<p>This course is an introduction to international relations and international organisations. Students gain clear insight into the political perspective and the concept of power. Topics such as governments and non-state actors, responsibility, accountability, geopolitical developments, global governance and political theory are all addressed. The course centres on four blocks:</p> <ul style="list-style-type: none"> <li>- Political Theory: the state and its functions / what are power, sovereignty, legitimacy, and authority; responsibility and accountability / the nation state / different political systems (e.g. autocracy, oligarchy, democracy) / republican principles and the separation of powers;</li> <li>- Norms, Institutions and Normative Orders: how norms emerge and change / the concept of normativity / introduction to institutional theory / what is an institution;</li> <li>- Peace and Peace Orders: intra- and international conflicts / political peace orders (UN, EU and their philosophical underpinnings) / fundamentals of Just War Theory / human rights and its predecessors;</li> <li>- International Politics and Cooperation: geopolitics and international regimes / international justice / development cooperation and environmental governance.</li> </ul> <p>Part of this course will be the introduction of the political dimension and the background of the SDGs. As such, it constitutes a constituent part of the Responsible Governance major. The course connects to foundation courses such as Introduction to Global Health, the Earth System and Principles of Economics as it prepares the ground for thinking through parallel global political processes. Furthermore, this course connects to the foundation course Explaining Human Behaviour as the normative expression of social mechanisms in larger groups and societies. The four pillars cut across the SDGs and explain their political backgrounds. At the same time, they more specifically touch upon SDGs # 8, 10, 11, 13 and 16.</p>
Literature	<p><b>Recommended literature</b></p> <ul style="list-style-type: none"> <li>- Hague, R., Harrop, M. &amp; McCormick, J. (eds.) (2016). <i>Comparative Government and Politics: An Introduction</i>. 10th edition. Basingstoke: Macmillan Education.</li> <li>- Brown, C., &amp; Eckersley, R. (eds.) (2018). <i>The Oxford Handbook of International Political Theory</i>. Oxford: Oxford University Press.</li> </ul>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Critically reflect on core theories in political science</li> <li>- Understand the fundamentals of political responsibility on multiple levels</li> <li>- Analyse political stakeholder fields, and write brief and precise political reports</li> <li>- Develop macro-solutions for global problems based on political and governance insights</li> <li>- Present solutions to global governance topics to non-expert audiences and defend their positions against critical inquiry</li> </ul>
Assessment	Group assignment, group presentation, individual review, participation.

Title of course	Principles of Economics
Course unit type	Foundation
Course content	<p>During the course, students will deal with questions such as: Why some countries are rich while others are poor? What are the consequences of economic growth for other societal outcomes such as pollution and inequality? What role can governments play when markets fail? Which factors play a role in the decision-making process of firms and consumers? To be able to answer these questions, this course covers the fundamentals of micro- and macroeconomics. The microeconomics part of the course covers economic decision-making by individuals and firms, the determination of quantities and prices of goods, and the theoretical basis for international trade. The macroeconomics part of the course covers topics such as the determination of the aggregate level of economic activity, long-run economic growth, government policies, and short-run economic stability (the rate of unemployment and inflation). This course offers a unified approach combining the two fields by using themes such as markets, development, social relations, and institutions. This way, students gain a clear insight into the interaction between individuals, households, firms, and governments.</p>
Literature	<p><b>Compulsory literature</b></p> <ul style="list-style-type: none"> <li>- Krugman, P., &amp; Wells R. (2017) <i>Essentials of Economics</i> (4<sup>th</sup> edition) New York: Macmillan.</li> <li>- The CORE Team (2017). <i>The Economy: Economics for a Changing World</i> (1<sup>st</sup> edition). Oxford, New York: Oxford University Press.</li> </ul>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <p><i>Content:</i></p> <ul style="list-style-type: none"> <li>- Explain and apply basic microeconomic principles such as demand and supply functions, competitive market equilibrium and beyond, public goods and externalities, cooperation problems.</li> <li>- Explain and apply basic macroeconomic principles such as national accounting, economic stability, public and monetary policy.</li> <li>- Explain and apply basic principles of international trade theory, among which comparative advantage, trade protection, and exchange rate.</li> <li>- Identify development issues across the world beyond economic performance.</li> <li>- Use relevant economic theories and methods to study the Sustainable Development Goals.</li> </ul> <p><i>Skills:</i></p> <ul style="list-style-type: none"> <li>- Use data for a fact-based analysis</li> <li>- Develop writing and oral skills</li> <li>- Work in a group setting</li> <li>- Link academic knowledge and practical use</li> <li>- Introduction to interdisciplinary learning</li> </ul>
Assessment	Written exam, group project, case study, assignment, participation

Title of course	The Earth System
Course unit type	Foundation
Course content	This course provides a general introduction into the mechanisms that determine the dynamics of the Earth system in the past, present and future. For example, the course deals with the role of the biosphere in climate- and global change and, vice versa, the loss of biodiversity associated with climate- and global change. The course builds on integration of disciplinary knowledge on Earth system processes such as hydrology, meteorology and biogeochemistry. It introduces the systems approach to study Earth system dynamics involving different temporal and spatial scales in process interactions and feedback mechanisms that explain observed climate- and global change. Emphasis is on Earth system interactions associated with dynamical, physical and biogeochemical processes affecting the state of the atmosphere, biosphere and hydrosphere under natural and anthropogenic conditions. The course's lectures are complemented with an intensive modelling practical, including the search for information on the Earth system. In this course there is also an introduction into the ethical and philosophical context of global and climate change issues.
Literature	<p><b>Compulsory literature</b> L.R. Kump, J.F. Kasting, R.G. Crane. (2010). The Earth System (3rd edition). Upper Saddle River, NJ: Pearson Education, Inc. ISBN 0-13-142059-3</p> <p>Course manual and additional papers that will be used in the assignments</p>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Understand and apply the systems approach in the context of climate- and global change issues;</li> <li>- Summarise the major Earth system compartments and associated dynamical, physical and biogeochemical processes;</li> <li>- Distinguish between natural and anthropogenic factors affecting the climate- and Earth system;</li> <li>- Formulate a basic view on ethical and philosophical considerations on Earth system theories;</li> <li>- Apply the gained knowledge and analysis skills to assess the role of fundamental Earth system processes in past- and present climate and global change which is essential to evaluate mitigation and adaptation strategies to cope with future climate and global change.</li> </ul>
Assessment	Written exam, weekly tests on content lectures, various short assignments.

Title of course	Explaining Human Behaviour
Course unit type	Foundation
Course content	<p>The course aims at understanding human behaviour within the context of individual, social, cultural and environmental factors. We will examine how these factors influence people's behaviour, cognition, and thinking as well as the way people make choices. We will cover basic research methods and theories from social psychology (social cognition, social influence, group processes etc.), giving a clear insight into the social psychological perspective and methodology. In addition, we will talk about those classical social psychology experiments, which will hopefully be a great source of inspiration for you to design similar approaches and experiments in the future.</p> <p>In particular, the course will address Sustainable Development Goal #3, 5, 7, 10, 11, 12, 13 and 16.</p> <p>The foundation course would help provide a theoretical basis for the Psychology track courses, such as Applied Social Psychology and Sustainable Decision Making. The course will complement other foundation courses in the majors Responsible Governance and Responsible Planet. For instance, the course will complement the foundation course The Earth System by zooming into human behaviour as the antecedent of many environmental problems. It will also add to the foundation course Principles of Economics by means of providing a different angle to explain human behaviour.</p>
Literature	<p><b>Compulsory literature</b></p> <ul style="list-style-type: none"> <li>- Hewstone, M., Stroebe, W., &amp; Jonas, K (Eds.). (2015). An Introduction to Social Psychology (6th ed.). Chichester: John Wiley &amp; Sons.</li> <li>- Inzlicht, M., &amp; Schmeichel, B. J. (2012). What is ego depletion? Toward a mechanistic revision of the resource model of self-control. <i>Perspectives on Psychological Science</i>, 7(5), 450-463. DOI: 10.1177/1745691612454134</li> <li>- Keizer, K., Lindenberg, S., &amp; Steg, L. (2008). The spreading of disorder. <i>Science</i>, 322 (5908), 1681-1685. DOI: 10.1126/science.116140</li> <li>- Steg, L., Bolderdijk, J. W., Keizer, K., &amp; Perlaviciute, G. (2014). An integrated framework for encouraging pro-environmental behaviour: The role of values, situational factors and goals. <i>Journal of Environmental Psychology</i>, 38, 104- 115. DOI: 10.1016/j.jenvp. 2014. 01.002</li> </ul>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Identify, explain, compare and evaluate key theories, concepts, methods and debates in social psychology</li> <li>- Reflect on individual, social, cultural and environmental factors shaping human behaviour</li> <li>- Reason why a theory-driven approach is needed to understand human behaviour</li> <li>- Use theories to reflect on the roots of global sustainability challenges</li> <li>- Write an academic essay discussing relevant social psychological theories to understand the roots of global sustainability challenges</li> </ul>
Assessment	Written exam, essay, presentation, participation

Title of course	Introduction to Global Health
Course unit type	Foundation
Course content	<p>The foundation course introduces students to the landscape of global health issues and challenges. Students develop an understanding of theories, key concepts, tools and frameworks essential for continued study in global health. They acquire basic competencies in collaboration, academic development and communication.</p> <p>Developing leadership and responsibility in health in a continuously changing global and local context, requires an ecosystem that seeks collaboration between different actors and different sectors. New health targets are set by the multi-sectoral Sustainable Development Goals. Therefore this introduction to Global Health emphasises the linkages with other foundation courses in the GLR study.</p> <p><i>The foundation course includes five themes:</i></p> <ol style="list-style-type: none"> <li>1. Definition of health</li> <li>2. Determinants of health</li> <li>3. Global burden of disease</li> <li>4. Health Systems analysis</li> <li>5. Stakeholder analysis and SDGs</li> </ol>
Literature	<p><b>Compulsory literature</b></p> <p>Skolnik, R. (2016). <i>Global Health 101 (3rd ed.)</i> Jones &amp; Bartlett Learning: Burlington.</p>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Reflect on their own perceptions on health in a global context.</li> <li>- Analyse health cases and debate how determinants relatively influence these health cases.</li> <li>- Differentiate between communicable and non-communicable diseases.</li> <li>- Take responsibility of resource allocation in a health system in collaboration with colleagues.</li> <li>- Analyse and reflect on roles and responsibilities of stakeholders in making implementation of the health-related SDGs successful.</li> </ul>
Assessment	Reflection report, presentation, essay, paper

Title of course	Introduction to Programming
Course unit type	Foundation
Course content	<p>Introduction to Programming aims at getting students acquainted with algorithms, algorithmic problem-solving and programming. We start with a brief history of computers, their main elements and limitations. Then we introduce notions of computer programmes and algorithms. The course continues with an introduction to algorithms and algorithmic modelling, and learning about basic concepts such as conditions and iteration flows (loops). Subsequently, students are introduced to computers and programming, learning to translate algorithms into programmes. Students study basic data structures, like character strings, arrays and sets, as well as programming structures, like variables, function calls and recursions.</p> <p>The Python programming language is used during the course to explain and practice programming concepts. Therefore, students also learn to develop, compile and run source code written in this language. Algorithmic and programming concepts presented in the course are illustrated by examples in the scope of the GRL curriculum, such as decision-making, data analysis and visualisation of geographical data, all related to the SDG's.</p> <p>This first-year course unit provides an in-depth introduction to the Information Technology discipline through practical algorithmic design and programming experience. It is the first of two foundation courses for the Information Technology discipline and serves as the basis for the second one, Introduction to Data Science.</p>
Literature	<p><b>Compulsory literature</b></p> <p>Downey, A. (2015). <i>Think Python: How to Think Like a Computer Scientist. (2nd ed.)</i> USA: Green Tea Press (online: <a href="http://greenteapress.com/wp/think-python-2e">http://greenteapress.com/wp/think-python-2e</a>). The online version of the book is distributed under the licence CC BY-NC 3.0 and can be downloaded for free for the purpose of this course.</p>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- List the main components of computers and computer programmes</li> <li>- Identify problems that can be solved with algorithmic solutions and determine the problem space</li> <li>- Resolve problems algorithmically and translate algorithms into software solutions</li> <li>- Implement basic software solutions using the Python programming language</li> <li>- Assess the solution against functional and non-functional requirements</li> </ul>
Assessment	Project (software design, implementation, presentation), written exam, computer exercises, active participation.

Title of course	Introduction to Data Science
Course unit type	Foundation
Course content	<p>Data Science is a fast-growing field that combines statistics and several fields of IT to provide theoretical and practical tools for exploring and solving data-related problems. Among its possible applications, data science is a powerful tool to support addressing global challenges, as they often involve reasoning based upon diverse and sizeable data. This course aims at developing a minimal set of skills necessary to start applying data science to real-world problems. For that, students are introduced to several topics related to three main components: data retrieval, visualisation and analysis. Also, students learn and apply basic techniques of each component. The basic techniques are practised throughout the course with weekly computer exercises, and the students demonstrate their acquired skills in a non-trivial project for analysing a real-world dataset. Finally, the course also briefly tackles societal and ethical implications related to the studied topics.</p> <p>Topics on data retrieval include traditional file-based datasets, database technologies, and streaming. Topics on data visualisation include reporting and plotting, qualities of visualisations, translation of statistical measures into visualisation, and visualisation best practices. Topics on data analysis include basic statistical tests, data clustering and machine learning. All data used and analysed are related to the global goals and as encountered / used by corporations, organisations and governments.</p>
Literature	<p><b>Compulsory literature</b></p> <ul style="list-style-type: none"> <li>- Brownley, C.W. (2016). <i>Foundations for Analytics with Python: From Non-Programmer to Hacker</i>. USA: O'Reilly Media, Inc.</li> <li>- Grus, J. (2015). <i>Data Science from Scratch: First Principles with Python</i>. USA: O'Reilly Media, Inc.</li> </ul>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Summarise the theory behind data science</li> <li>- Understand the context of datasets</li> <li>- Inspect, filter, analyse and visualise datasets</li> <li>- Integrate and reorganise different datasets</li> <li>- Hypothesise and forecast observations about datasets</li> <li>- Apply basic machine learning algorithms to datasets</li> <li>- Take responsibility on the usage of data (e.g. privacy and security concerns)</li> </ul>
Assessment	Project (report, implementation, presentation), written assignments, computer exercises, active participation

Title of course	Academic Communication
Course unit type	Skills Lab
Course content	<p>In this course, students learn to develop strategies for finding and analysing relevant academic literature and presenting these findings in an academic manner, both written and verbal. Students learn to recognise and discuss patterns of reasoning and express complex ideas in academic work through argument structure and persuasive reasoning. Learning to provide peer feedback and self-reflection on performance are also part of the programme, next to essential study skills such as online library use, referencing requirements and avoiding plagiarism. Throughout the course, students will apply these skills in written and verbal assignments, the content of which is related to the SDGs. This course supports and enhances students' academic performance in every other course of the GRL bachelor.</p>
Literature	<p><b>Compulsory literature</b></p> <p>Forshaw, M. (2012). <i>Critical thinking for psychology: A student guide</i>. John Wiley &amp; Sons.</p> <p>In addition you will receive relevant texts, video links, and other materials in advance. This allows the course a certain amount of flexibility, to more accurately reflect and respond to your interests, capacities, and needs</p>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Write an academic paper making use of basic argument structure to order their paper</li> <li>- Present a reliable argument both written and verbal</li> <li>- Analyse academic text.</li> <li>- Find and use relevant literature and distinguish what is academically sound and relevant</li> <li>- Reference used sources correctly and avoid plagiarism (research integrity)</li> <li>- Perform a literature review on the state-of-the-art of a field or topic of their choosing (related to SDG's), as a basis for elaborating a testable hypothesis</li> <li>- Give a structured presentation, using persuasive techniques to get their point across</li> <li>- Give and receive feedback and reflect on their own performance</li> </ul>
Assessment	Paper, presentation, poster, peer review, participation, reflection

Title of course	Language and Culture I
Course unit type	Skills Lab
Course content	<p>Language and culture have a direct influence on how we see the world. Our individual values and beliefs shape the way in which we perceive concepts and practices. In a globalised world, we constantly come into contact with people whose backgrounds and viewpoints diverge from our own. These varying outlooks can lead to difficulties in mutual understanding and communication.</p> <p>This course is dedicated to understanding the role that language and culture have on the practice of science. Through the use of case studies and interactive assignments (linked to the SDG's where possible), students will come to understand the complex interplay between language, culture, knowledge and communication from the viewpoint of different disciplines including sociology, social psychology and anthropology.</p> <p>Students will be challenged to reflect on their own identity and discuss how it impacts on the way they perceive the world and engage with people around them. The notion of diversity will be discussed in detail, with a key focus on how their own concept of diversity influences their world-view. Additionally, students will reflect on how communication differs between cultures and how this can impact on effective communication. Students will further develop the academic communication skills first introduced in Academic Communication.</p>
Literature	<p><b>Compulsory literature</b></p> <ul style="list-style-type: none"> <li>- Bowe, H., Martin, K. &amp; Manns, H. (2014). <i>Communication Across cultures: Mutual Understanding in a Global World</i>. Cambridge: Cambridge University Press.</li> <li>- Foley, W.A. (1997). <i>Anthropological Linguistics</i>. UK &amp; USA: Blackwell Publishers Ltd.</li> <li>- Giddens, A. &amp; Sutton, P. (2017). <i>Sociology</i> (8th edition). UK &amp; USA: Polity Press.</li> </ul> <p>The courses also makes use of a reader of supplementary articles and current newspaper articles related to topics studied.</p>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Critically analyse empirical literature and theories presented during the course</li> <li>- Independently consult and synthesise academic sources for use in assignments</li> <li>- Collaborate effectively with a diverse cohort of students by actively participating in group activities and assignments</li> <li>- Relate theory studied in the classroom to real life situations</li> <li>- Articulate the complex relationship between language, culture, knowledge and communication</li> <li>- Explain the concept of cultural learning</li> <li>- Reflect on the impact of culture on their values, assumptions, perceptions, expectations and behaviour</li> <li>- Listen to and communicate effectively with a diverse group of people, using effective verbal and nonverbal strategies</li> </ul>
Assessment	Poster, essay, presentation, participation, poster plan, essay plan

Title of course	Statistics I
Course unit type	Foundation
Course content	<p>Practical knowledge of statistics is a fundamental skill for researchers in all scientific disciplines. The recent growth of Big Data Applications and Data Science only enhances the need for students to have solid theoretical knowledge of statistical analysis to help them understand their own data as well as the analyses performed by others.</p> <p>The aim of Statistics I is to engage students with the fundamental concepts of statistical analysis and basic tools in statistical analysis using descriptive and univariate analysis, and research data management. Starting with the theoretical background of statistics, students are taught to engage critically with data-set characteristics; samples and populations, sampling strategies, and correlations. Subsequently, characteristics of the data in the data-set are discussed, dealing with measurement levels, central tendency, dispersion, distributions, and generalisations using the central limit theorem. The final part of the course focuses on statistical inference using techniques such as: t-test and difference of proportion test, and an introduction to linear regression.</p> <p>Throughout the course, students are required to use R for their statistical analysis. A working knowledge of R, with its large developer support and comprehensive library of basic and cutting-edge statistical packages, means students will be able to easily transition from basic to more advanced statistical tools. R also provides interfaces from R to Python, and from Python to R, which allows students to easily transfer their knowledge between Statistics I, and Introduction to Programming and Introduction to Data Science. Throughout the course, students will be taught to follow best-practices using the “tidyverse” principles, in data management and transformation, analysis, and visualisation.</p>
Literature	<p><b>Compulsory literature</b></p> <p>Diez, D. M., Barr C. D., &amp; Çetinkaya-Rundel, M. (2016) <i>OpenIntro Statistics</i> (open-access through <a href="https://www.openintro.org/stat/">https://www.openintro.org/stat/</a>)</p> <p>Grolemund, G., &amp; Wickham, H. (2017). <i>R for Data Science</i>. Sebastopol, CA: O'Reilly Media Inc. (open-access through <a href="http://r4ds.had.co.nz/">http://r4ds.had.co.nz/</a>)</p>
Course learning outcomes	<p><b>Upon the successful completion of this course, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Understand data sampling including sampling techniques, advantages and drawbacks, and generalisability</li> <li>- Understand the basic characteristics of variables and associated limitations</li> <li>- Inspect and analyse the data taking into account the variable and data-set characteristics and the research design</li> <li>- Interpret the results</li> <li>- Report and reflect on method, data, and results</li> </ul>
Assessment	Written exam, computer exercises, portfolio, active participation

## Courses year 2 and year 3

MAJOR: Responsible Planet	
Earth System Sciences track	<ul style="list-style-type: none"> <li>- Ecosystem Processes &amp; Services (100)</li> <li>- Climate Change: Land, Air &amp; Water (200)</li> <li>- Climate Services and Global Governance (300)</li> </ul>
Energy track	<ul style="list-style-type: none"> <li>- Introduction to Sustainable Energy Transition (100)</li> <li>- Homes and cars: technologies, citizens and energy transition (200)</li> <li>- Petrocultures in Transition (300)</li> </ul>
MAJOR: Responsible Governance	
Political Science track	<ul style="list-style-type: none"> <li>- Key Political Thinkers (100)</li> <li>- Comparative Political Systems (200)</li> <li>- Global Sustainability Governance (300)</li> </ul>
Economics track	<ul style="list-style-type: none"> <li>- History of Economic Thinking (100)</li> <li>- Behavioural Economics (200)</li> <li>- The 22nd Century Economy (300)</li> </ul>
MAJOR: Responsible Humanity	
Psychology track	<ul style="list-style-type: none"> <li>- Applied Social Psychology (100)</li> <li>- Psychological Perspectives on Leadership and Organizations (200)</li> <li>- Consumer Psychology (300)</li> </ul>
Global health track	<ul style="list-style-type: none"> <li>- Diversity, Intersectionality and Global Health (100)</li> <li>- Global Equity and Resilient Health Systems (200)</li> <li>- Comparative Health Systems and Approaches to Health (300)</li> </ul>
Skills Lab	<ul style="list-style-type: none"> <li>- Leadership Lab</li> <li>- Statistics II</li> <li>- Qualitative Methods</li> <li>- Language &amp; Culture II</li> </ul>
Major requirements & Major Electives	<ul style="list-style-type: none"> <li>- Ethics &amp; Global Responsibility</li> <li>- Information Technology and its Implications (200)</li> <li>- Sustainable Tourism (200)</li> </ul>

Visit the online [course catalogue](#) for detailed information!

## Unique features



### Living Labs

The Living Lab project is a unique feature of the Global Responsibility & Leadership programme and provides you with the opportunity to apply your academic knowledge and skills in the real world. During the Living Lab project, you work together with private and public stakeholders and learn how to translate a real-world question into one suited to academic research, carry out the research, and then translate your findings back into recommendations for the stakeholder. As such, the Living Lab project creates a win-win situation: you learn how to apply your academic knowledge in actual, real-life contexts and develop related skills (communication, collaboration, problem-solving, research). Conversely, public and private stakeholders get to work with talented young people that are able to provide insight into questions important for the region and beyond.

### Details

- Research internship
- Public and private stakeholders
- 20 weeks: year 2 - semester 2
- Supervisor at UCF and at the local organisation
- Work on local solutions for global challenges

### Study abroad

We encourage and facilitate our students to broaden their horizons by studying abroad for a semester in the third year of the programme. Studying abroad provides you with a new perspective and helps you develop the cultural sensitivity that is needed to address global challenges on the international playing field. Moreover, a semester abroad allows you to experience a new country and its culture and traditions by studying in a different educational system. This is your chance to see the world make lifelong friends from diverse backgrounds! Not to mention, studying abroad enhances your employability, as employers value and increasingly require international experience.

### Details:

- Exchange programme
- 20 weeks: year 3 – semester 1
- Personal guidance at UCF and host university
- Partner universities in Europe, North-America, Latin-America, South-East Asia and Oceania

# Weekly schedule year 1 (example)

## Term 1

	09:00 - 11:00	11:00 - 13:00	13:00 - 15:00	15:00 - 17:00
Monday	Academic Communication	Introduction to Programming	Volunteer at local environmental organisation	
Tuesday	Prepare for class		Politics, Power & International Responsibility	Go to the gym
Wednesday	Introduction to Programming	Work on group project for class		
Thursday	Study in the library	Academic Communication	Politics, Power & International Responsibility	Relax
Friday	Day off			

## Term 2

	09:00 - 11:00	11:00 - 13:00	13:00 - 15:00	15:00 - 17:00
Monday	Prepare for class	Statistics I	Take an extra-curricular class in Spanish	
Tuesday	Explaining Human Behaviour	The Earth System	Work on group project	
Wednesday	Day off			
Thursday	Prepare a presentation	Statistics I	Study in the library	
Friday	Explaining Human Behaviour	Work on group project	The Earth System	Go to the gym

## Term 3

	09:00 - 11:00	11:00 - 13:00	13:00 - 15:00	15:00 - 17:00
Monday	Day off			
Tuesday	Study in the library	Language & Culture I	Applied Social Psychology	Relax
Wednesday	Work on group project for class		Introduction to data science	Prepare for class
Thursday	Language & Culture I	Volunteer at the elderly home in town		
Friday	Go to the gym	Introduction to Data Science	Applied Social Psychology	Relax

## Term 4

	09:00 - 11:00	11:00 - 13:00	13:00 - 15:00	15:00 - 17:00
Monday	Key Political Thinkers	Introduction to Global Health	Meet with fellow committee members to plan a trip abroad	
Tuesday	Relax	Principles of Economics	Study in the library	
Wednesday	Introduction to Global Health	Work on group project		
Thursday	Prepare a presentation	Key Political Thinkers	Principles of Economics	Go to the gym
Friday	Day off			

## Legend:

Foundation
Skills lab
Major
Study
Extra curricular

## Contact information

E-mail: [ucf-grl@rug.nl](mailto:ucf-grl@rug.nl)  
 Website: [www.rug.nl/cf/ucf](http://www.rug.nl/cf/ucf)

## FOLLOW US!

Facebook: University College Fryslân  
 Twitter: @CampusFryslan

#globalchallengeslocalsolutions  
 #glocal

