



### 2<sup>nd</sup> International **Conference on Sustainable Development Goals: Higher Education & Science** Take Action 5-6<sup>th</sup> March 2020 Barcelona GLOBAL UNIVERSITY NETWORK FOR INNOVATION

# Seeing the world on a small island: undergraduate research for sustainable societies

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#### Introduction

Our undergraduate research program stimulates bachelor students from the University of Aruba (UA) and Utrecht University (UU) students to engage with societal challenges and the world at large.

- Field site is Aruba, a **small island state** with cultural history, socioeconomic circumstances and a natural environment make it well-suited as a site for SDG-related field work in disciplines across the academic spectrum.
- Students employ principles of community-based research in diverse individual projects
- Students form an intercultural and interdisciplinary team and support each other's research process in a peer-to-peer learning context
- Cultural and intellectual exchange with each other and with stakeholders in the Aruban community enhances students' understanding of other cultures, their own society, and their role in the world.

# **Program Objectives**

Research skills

Societal Engagement

#### Skills in:

- Research planning
- **Empirical** methods / data collection
- Analysis of empirical data
- Communicating about results to diverse audiences

#### Personal Development

- Research addressing societal issues
  - Different kinds of

**Appreciation for:** 

- knowledge Relationship postcolonial world /
- Impact of globalization

N\PSARUBA

Europe

- **Enrichment of:**
- Perspective on diversity International social/

professional network

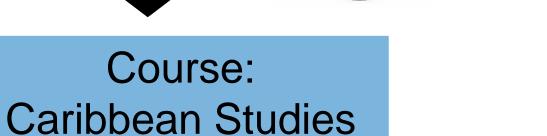
- Sense of competence/ efficacy
- Vision for own future

**Program Design** 

**UU** students







Recruitment/ Selection -fall semester-

Peer editing paper



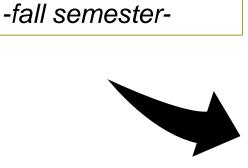
Application/

Selection

Course:

- spring semester -





- spring semester – Field Period (10-11 weeks) Community-based

research activities data collection

preliminary analysis

peer-to-peer learning: sharing & supporting

#### Contextualization & team-building

- Team meetings on individual research aims & approaches
- Excursions highlighting cultural, social, economic & environmental challenges
- Initial contact with (potential) stakeholders & research informants

#### Connecting via knowledge

Student-researchers work with each other, with stakeholders and with young research partners from UA's Academic Foundation Year

### **Sharing & communicating results**

- Students write and peer review papers for annual program volume
- Students present research outcomes to community at **public symposium**

# **Key Outcomes**

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Example student projects	SDGs	Year
The assessment of Aruba's shoreline pollution	13,14	2015
Employee perceptions of internal	3, 17	2015
communication within the health sector		
Diabetes management in a changing society	3	2016
The role of English in Aruba's linguistic	11	2016
landscape		
Calypso and cultural commodification in Aruba	11,12	2017
Assessment of endemic fauna in key	15	2017
biodiversity areas		
Emotional impact in people with disabilities	3,10	2017
striving to be independent in Aruba		
Policy for energy system innovation: multi-actor	11,13,17	2018
policy-making of the Aruba energy transition		
The impact of illegal dumpsites on the	15	2018
environment		
Sharing stories bao palo: the making of	9,10,11	2019
heritage in a Caribbean oil town		
Off-road driving and the ecosystem: impacts on	15	2019
landscape functionality		
Import costs of fruits and vegetables on Aruba:	2	2019
mitigating the volatility of prices to ensure		
sustainable supply		

#### Program project spin offs

- Impact in Aruban context: inspiration for community initiatives, local activism and policy proposals
- Academic publications of research outcomes
- Alumni engagement in Aruban education programs

#### In participants' own words

Getting a chance to go public with what I've researched was a new and unique experience for me.

[Working with] students of other disciplines ... made me think ... [beyond] what I've learned in my study.

The program granted me the possibility of meeting key people, improving my thesis results so these could really make a difference and benefit Aruba.

A simple bachelor's thesis turned from an annoying requirement into an opportunity to make a difference :)

A life changing experience ... it helped to form us considerably at a professional and academic level, but it also opened a window into the future to give us a glimpse and first-hand experience of what we believe are our passions.

# **Key Outcomes: Numbers**

#### **Outcomes 2014-2019 in numbers**

UU students completing preparation course	47
UU students completing field research program	26
UA students completing field research program	31
Field research projects in annual volume	56

All projects include community-based dimensions & address needs in Aruban society.

Projects link to one, and often more, global SDGs.

#### Total projects per SDG (2015-2019)

Total projects per 3DG (2013-2013)							
1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION		
1	1	6	4	1	2		
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION		
1	10	3	6	8	4		
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS			
9	5	7	5	9	THE GLOBAL GOALS For Sustainable Development		

These totals include projects involving cultural heritage, linking them to SDG5, 8, 11, 16 and 17. depending on the focus.

# Conclusions

- Undergraduate research in context of diversity: a pedagogical instrument that creates a transformative and empowering experience for students.
- Students benefit personally from cultural and intellectual exchange.
- CBR & peer-to-peer learning: understanding and appreciation of different kinds of knowledge.
- Research skills made meaningful for students and society by invoking SDGs.
- Bachelor students make transition from student to independent researcher (quality research)
- Outcomes of undergraduate research have impact in the context of the small island state.

# Acknowledgements

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For detailed information, see

UA website: <a href="http://www.ua.aw/international/">http://www.ua.aw/international/</a> UU website: https://tinyurl.com/qvc8naw