**TROP ICSU: Trans-disciplinary Research Oriented Pedagogy for Improving Climate Studies and Understanding**

**(<https://tropicsu.org>)**

In Collaboration with Beijing Institute of Genomics, CAS

Invites Educators and Teachers

for a

Faculty Development Program cum Workshop

On

**CLIMATE ACROSS THE CURRICULUM: EDUCATIONAL RESOURCES FOR TEACHERS**

**May 9-10, 2019**

Background: Climate Change is one of the most significant issues of our times and a key impeding factor affecting the pace of sustainable and equitable development of every country. Educating forthcoming generations about the causes and effects of global climate change is imperative as implementing solutions depends on their scientific, technical, and leadership abilities. As the climate change problem is complex and requires multi-disciplinary approaches to the solutions, existing cross-disciplinary collaborations between geoscientists, biologists, and ecologists must be broadened to assimilate input from the human and behavioural sciences, from law and politics, and even media and the creative arts. In this context, there is an urgent need to develop new education modules and pedagogical methods to inculcate environmental understanding in today’s students, in such a way that, every future citizen would be better equipped to identify appropriate solutions to mitigate climate change and reverse its impacts.

About the workshop: In this context, a climate change education project, TROP ICSU ([https://tropicsu.org](https://tropicsu.org" \t "_blank)), has been initiated as a [global project](https://council.science/what-we-do/funding-programmes/icsu-grants-programme" \t "_blank) with generous support by the [International Science Council](https://council.science/" \t "_blank). It aims to improve awareness of climate change and the science behind it among students by developing teaching aids for teachers at the high school (secondary school) and undergraduate (Bachelor's degree) levels. Our educational resources, with detailed step-by-step descriptions to use them in regular lectures (see: [https://tropicsu.org/resources/lesson-plans/](https://tropicsu.org/resources/lesson-plans/" \t "_blank)), are designed in such a way that in addition to bringing climate-related examples and case studies to the core curriculum, they also enhance conceptual understanding of the topics in basic sciences, mathematics, social science and other disciplines. The latter would incentivize teachers to use our resources.

To make educators/teachers acquainted with this initiative, to provide detailed information on how to use these educational resources in their regular teaching, and to seek their collaboration to review/improvise and expand our education resources, we have envisaged a workshop for undergraduate teachers of all disciplines.

Registration is free, which includes participation in the workshop and boarding. Accommodation will be provided to few outstation participants on first-come-first-served basis.

BRIEF OUTLINE

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| About the workshop | This workshop is designed to (i) introduce the participants to digital educational tools and innovative teaching practices in their classroom to teach topics in different disciplines using climate-related examples, case studies, and activities and (ii) demonstrate a new pedagogical approach to help improve the understanding of climate change among students while simultaneously enhancing their conceptual understanding of topics in different disciplines. In this interactive workshop, participants will carry out hands-on activities through the use of different types of digital teaching tools. Participants will also develop their own lesson plans that can be used to teach topics from different disciplines using climate-related activities, examples, and case studies. |
| Conducted by | TROP ICSU Project Team |
| In Collaboration with | Beijing Institute of Genomics, CAS |
| For whom | Senior high school-level and Undergraduate-level teachers of all disciplines (Biology, Physics, Chemistry, Mathematics, Statistics, Social Sciences, Humanities, Economics, Geography, and Earth Sciences) |
| Date | 9–10 May, 2019 |
| Location | Beijing, China |
| Contact | Email: workshop@big.ac.cn |
| Phone: 010-84097298; 010-84097417 |
| Registration | Registration is free, which includes participation in the workshop and lunch |
| Additional information (or requests) | Participants are requested to bring their own laptops  English and Chinese PPT presentations  Certificates will be issued at the end of the workshop |

**Tentative Schedule**

**Day 1:**

08.30 AM to 09.00 AM: Registration

09.00 AM to 09.30 AM: Introduction of Participants

09.30 AM to 09.40 AM: Welcome remarks (Partner Organization)

09.40 AM to 09.55 AM: Welcome remarks (TROP ICSU)

09.55 AM to 10.40 AM: Introduction to the TROP ICSU Project

10.40 AM to 10.55 AM: [Tea/Coffee]

10.55 AM to 11.45 AM: Demonstration of digital teaching tools that integrate climate topics with core curriculum

11.45 AM to 12.30 PM: Demonstration of step-by-step lesson plans that integrate climate topics with core disciplinary teaching

12.30 PM to 1.30 PM: [Lunch]

1.30 PM to 2.30 PM: Group activity: Review of discipline-specific teaching tools

2.30 PM to 2.45 PM: [Tea/Coffee]

2.45 PM to 3.45 PM: Group activity: Review of discipline-specific lesson plans—their connectivity to the curricular topics and utility for the understanding of the concepts

3.45 PM to 5.00 PM: Discussions on participants’ review of teaching tools and lesson plans

**Day 2:**

08.30 AM to 09.00 AM: Registration

09.00 AM to 09.15 AM: Introduction to the design components of a Lesson Plan

09.15 AM to 11.00 AM: Group activity: Design lesson plans that integrate climate topics with their regular teaching

11.00 AM to 11.15 AM: [Tea/Coffee]

11.15 AM to 12.00 PM: Group activity (continued): Design lesson plans that integrate climate topics with their regular teaching

12.00 PM to 12.30 PM: Presentations of lesson plans designed by the participants

12.30 PM to 1.30 PM: [Lunch]

1.30 PM to 3.00 PM: Presentations of lesson plans designed by the participants

3.00 PM to 3.15 PM: [Tea/Coffee]

3.15 PM to 4.15 PM: Open Discussions: Feedback on the workshop and teaching resources, and discussion on long-term engagement of participants with TROP ICSU

4.15 PM to 5.00 PM: Closing remarks