

## **Name of course: Journal Club on Soil Organic Matter (AGRO)**

**ECTS credits: 1.5**

### **Course parameters:**

*Language:* English

*Level of course:* PhD course

*Semester/quarter:* October to December 2021

*Hours in total:* approx. 36 hours (including preparatory reading before and during the course, presentations and discussions during the course)

*Capacity limit:* 10 participants

### **Objectives of the course:**

The objectives of the course are to:

- present the contemporary understanding on the nature of soil organic matter (SOM) and the stabilization processes
- locate the newest research on SOM dynamics across different agroecosystems with a focus on approaches to quantify SOM in agricultural soils
- inspire students to broaden their perspective on how SOM can be studied
- train the student's skills in scientific communication and critical thinking

### **Learning outcomes and competences:**

At the end of the course, the student **should be able to:**

- have an overview of the up-to-date knowledge on dynamics of SOM
- have an overview of different methods to quantify SOM and measure stability of SOM
- be able to discuss and differentiate between “old and new paradigms of SOM”
- know where to find and keep track with future research on SOM
- review a scientific paper in an efficient manner (give an overview in less than 5 minutes)
- prepare good oral presentation slides to present an article in less than 20 minutes
- consider research ethics in own work, and when presenting a topic (include opposing views)

### **Course contents/Sessions:**

Each participant will present at least one article from a peer-reviewed scientific journal during the journal club (JC). This will circulate. During the first meeting we agree on who takes which dates, which can then be switched around if needed. All participants must have read the selected paper before the meeting. The paper is sent to the other participants at the latest one week before the meeting. In-class activities include:

- The presenter presents the article chosen (less than 20 minutes)
- The presenter is offered to relate the paper to own work (10 min)
- Questions from the crowd, and open discussion on the topic presented in the paper (30 min). Here other participants can relate the paper to their work. In the end of each session, the participants evaluate the article and discuss the most important content to bring home. The structure of the article, tables and figures is also discussed to learn for own work.

### **Prerequisites:**

PhD students (and above) from Agroecology

### **Responsible of the journal club:**

Zhi Liang (Department of Agroecology, Aarhus University)

### **Time and compulsory program:**

- 10 sessions (October to December 2021, one meeting per week)
- Participants are required to attend at least 80% of the sessions to get the ECTS.

**Place:** AU-Foulum – physical meetings

***Meetings are Wednesdays in October, November, and December (10:00-11:00) at AU Foulum in PV22 (physically) with a few exceptions:***

*Tues. the 05/10 at 13:30 at Teams*

*Wed. the 13/10*

*Wed. the 20/10 (or likely autumn break this week)*

*Wed. the 27/10*

*Tues. the 02/11 at 13:30 at Teams*

*Tues. the 09/11 at 13:30 at Teams*

*Wed. the 17/11*

*Wed. the 24/11*

*Wed. the 01/12*

*Wed. the 08/12*

*Wed. the 15/12*