

Course Type  Lecture  Lab  
 Practicum  Thesis/I.S.  
 Measurement and Evaluation  A-F  S/U  P

Selected Topic (if any)  Count the accumulated credits for graduation every times  
 Count the accumulated credits for graduation one – times only

Abbreviation : ALT AGRI SYST FR SUS DEV

Prerequisite: None

### Course Description

Principle and practices of alternative agriculture systems, typology of alternative agriculture systems: organic agriculture, agro-forestry, integrated farming. The course will provide vulnerability contexts and risk influencing farmers' livelihoods, farmers' adaptive strategies to achieve sustainable livelihoods. The course will highlight on local knowledge in sustainable agriculture and food production systems and social and technological innovations for sustainable development. The Sufficiency Economy Philosophy principle for resource regeneration, economic stability and self-reliance, and principle of systems properties assessment will provide. Case studies sand challenges of alternative agricultural systems to meet sustainable development goals will be discuss

**Course Objectives** Students will be able to:

1. explain the principle and practices of alternative agriculture and assessing of performance for sustainable development
2. apply their knowledge for various issues of risk that impact to communities

Course contents	No. lecture hours
1. Principle and practices of alternative agriculture systems	2
2. Typology of alternative agriculture systems: organic agriculture, agro-forestry, integrated farming	4
3. Vulnerability contexts influencing farmers' livelihoods	2
4. Farmers' adaptive strategies to achieve sustainable livelihood	2
5. Local knowledge in sustainable agriculture and food production systems	2
6. Social and technological innovations for sustainable development	4
7. Sufficiency Economy Philosophy principles for resource regeneration, economic stability, and self-reliance	4
8. Assessment of systems properties	4
9. Case studies for understanding system properties	4
10. Challenges of alternative agricultural systems to meet sustainable development goals	2
<b>Total</b>	<b><u>30</u></b>

