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| Module designation |  *Global Warming* |
| Module level, if applicable |  *Bachelor* |
| Code, if applicable |  *PNT20192034* |
| Subtitle, if applicable |  |
| Courses, if applicable | 1. *Introduction, Understanding Global Warming, Changes in temperature, Green House Gases, Solar Variation, Aerosol and Soot*
2. *The fundamental causes of global warming, natural causes of global warming, Enhanced Global Warming.*
3. *Impact of Global Warming, Overview, Physical influence, Influence on weather, Influence on acidification, oxygen deplation, sea level rise, Effect on plant biodiversity, Effect on soil*
4. *Response to Global Warming, Kyoto Protocol, Coppenhagen Summit, Post-Kyoyo Protocol*
5. *Intergovernmental Panel on Climate Change (IPCC), Clean Development Mechanism (CDM)*
6. *La Nina, El Nino, Drought, Forest Fire, Flood, Landslide*
7. *Greenhouse gas emissions in Agriculture: Causes of greenhouse gas emissions, Interrelation of global problems and agriculture.*
8. *Greenhouse gas mitigation in Agriculture: The impact of global warming in agriculture on mitigating global warming*
9. *Adaptation to global warming, Agronomic adjustment, Early warning, Driving factor for adaptation*
10. *Current issues regarding global warming and research on global warming*
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| Semester(s) in which the module is taught |  *Even* |
| Person responsible for the module | *Dr. Ir Rachmad Gunadi, M. Si.* |
| Lecturer | *Dr. Ir Rachmad Gunadi, M. Si.**Dr. Ir. Benito Heru Purwanto, M. P., M. Agr. Sc.* |
| Language |  *Bahasa/Indonesian language* |
| Relation to curriculum | *Elective* |
| Type of teaching, contact hours | *Lecture, practical, presentation* |
| Workload | *2/0 SKS or 3,02/0 ECTS* |
| Credit points |  |
| Requirements according to the examination regulations | *Presence must be 70% of all meetings**Has to accomplished all the assignments* |
| Recommended prerequisites | *-* |
| Module objectives/intended learning outcomes | *Students can know and understand the definition of global warming, the causes and effects of global warming**Students are able to understand and study the Coppenhagen Summit, Kyoto Protocol, and post-Kyoto Protocol negotiations regarding greenhouse emissions in relation to agriculture**Students understand the relationship between global warming and agriculture and the impact of global warming on agriculture**Students can study current issues and policies regarding global warming* |
| Content | 1. *Introduction*
2. *Definition, causes, and impacts of global warming*
3. *Developments regarding the Intergovernmental Policy on global warming*
4. *Intergovermental Panel of Climate Change (IPCC) and Clean Development Mechanism (CDM)*
5. *Climate and disaster phenomena in Indonesia*
6. *Greenhouse gas emissions in Agriculture*
7. *Mitigation of greenhouse gases in Agriculture*
8. *Adaptation to global warming*
9. *Current issues regarding global warming*
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| Study and examinationrequirements and forms of examination | *Assesment Presentation/UTS/UAS* |
| Media employed |  *Text, Presentation, Visual & Audio Web.* |
| Reading list | *1. Haldar, Ishita. 2010. Global Warming: The Causes and Consequeces**2. Jonaslabee, S. L. 2019. Global Warming and Agriculture**3. Nugroho, B. D. A. 2016. Fenomena Iklim Global, Perubahan Iklim dan Dampaknya di Indonesia**4. Lizumi, T., R. Hirata, and R. Matsuda. 2019. Adaptation to Climate Change in Agriculture: Resesarch and Practies* |