|  |  |
| --- | --- |
| Module designation | *Water Management for Agriculture* |
| Module level, if applicable | *Bachelor* |
| Code, if applicable | *PNT20192215* |
| Subtitle, if applicable |  |
| Courses, if applicable | *1. Introduction*  *2. The definition of water management*  *3. Soil, and water relationship in plant growth*  *4. Plant Water Requirements*  *5. Water Management of Irrigated Paddy Field*  *6. Measurment and Channeling of Irrigation Water*  *7. Water Quality for Agricluture*  *8. The Drainage of Agricultural Area*  *9. Water Harvest*  *10. The Act on Irrigation* |
| Semester(s) in which the module is taught | *Even* |
| Person responsible for the module | *Dr. Ir. Rachmad Gunadi, M.Si.* |
| Lecturer | *Ir. Suci Handayani, M.P.*  *Dr. Ngadisih, S.T.P., M.Sc.*  *Nur Ainun Harlin Jennie Pulungan, S.Si., M.Sc., Ph.D*  *Dr. Murtiningrum, S.T.P., M.Eng.*  *Prof. Dr. Ir. Fatchan Nurrochmad, M.Agr.*  *Ir. Mulyono, M.S.*  *Fathi Alfinur Rizqi, S.T.P., M.Sc.*  *Andi Syahid Muttaqin, S.Si., M.Si.*  *Imas Masithoh Devangsari, S.P., M.Sc.* |
| Language | *Bahasa/Indonesia Language.* |
| Relation to curriculum | *Compulsory* |
| Type of teaching, contact hours | *Lecture, practical, and presentation.* |
| Workload | *2/1 SKS or 3,02/1,51 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 are able to understand aspects of water management, the consept of calculation and provision of water for agriculture.*  *Students are able to understand problems related to water management, have basic knowledge and insight into the scope of water management.*  *Students are able to apply concepts related to water management for agriculture in the community and can solve various problems that arise in practical activities in the field.* |
| Content | *1. Introduction*  *2. The definition of water management*  *3. Soil, and water relationship in plant growth*  *4. Plant Water Requirements*  *5. Water Management of Irrigated Paddy Field*  *6. Measurment and Channeling of Irrigation Water*  *7. Water Quality for Agricluture*  *8. The Drainage of Agricultural Area*  *9. Water Harvest*  *10. The Act on Irrigation* |
| Study and examination requirements and forms of examination | *Assesment Presentasi/UTS/UAS* |
| Media employed | *Text, Presentation, Visual & Audio Web.* |
| Reading list | 1. *Doorenbos. J and Pruit, W.G. 1977. Guideline for Predicting Crop Water Requirement. FAO. UN. Rome* 2. *Fak. Pertanian UGM. 1983. Peningkatan efisiensi pemanfaatan air pada tingkat usaha tani. Prosiding Diskusi Panel UGM-DPU, 16-18 Maret 1983.* 3. *Hukkeri, S.B & S. L. Pandey. 1977. Water requirrement and irrigation of crop. Dalam : Water requirrement and irrigation management of crop in India. India Agric Res Inst. New Delhi. 162-273* 4. *Smith, M. 1992. Cropwat : Computer program for irrigation planning and management. FAO. UN-Rome* 5. *Notohadipawiro, T. 1975. Beberapa Parameter Penting Air Tanah Sebagai Air Pengairan untuk ,Menduga Pengaruhnya atas Produktivitas Tanah. Seminar Pengembangan Air Tanh untuk Irigasi. Ditjen Pengairan PUTL. Surabaya.* 6. *Orson, W.I. 1956. Irrigation Principles and Practises. John Wiley and Sons Inc. New York. London* |