Example form for Module Handbook

A **Module Handbook or collection of module descriptions that is also available for students to consult** should contain the following information about the individual modules:

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| Module designation | Soil Biology |
| Module level, if applicable | Bachelor |
| Code, if applicable | PNT 3119 |
| Subtitle, if applicable |  |
| Courses, if applicable | 1. Pengantar Biologi Tanah 2. Habitat Tanah 3. Sifat kimia tanah 4. Kompoen biota tanah : jamur & mikoriza 5. Nutrisi, metabolisme & pertumbuhan biota tanah 6. Daur Fosfor 7. Meso dan mikrofauna tanah 8. Metodologi penelitian meso- dan mikrofauna tanah 9. Komposisi dan siklus karbon organik dan nitrogensilkus Sulfur 10. siklus nutrisi mikro dalam tanah 11. biologi tanah di tanah tergenang |
| Semester(s) in which the module is taught | even |
| Person responsible for the module | Dr. Ir. Benito H. Purwanto, MS., M. Agr. Sc. |
| Lecturer | Dr. Ir. Benito H. Purwanto, MS., M. Agr. Sc.  Dr. Ir. Jaka Widada, M.P.  Dr. Ir. Nugroho Susetya Putra, M.P. |
| Language | Bahasa/Indonesian language |
| Relation to curriculum | Non Compulsory |
| Type of teaching, contact hours | Lecture, practical, discussion |
| Workload | 2/0 SKS or 2,32/0 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 describe the interrelationship between soil physical and chemical factors, macro and micro soil organisms in terms of the processes of formation and destruction of important compounds in the soil.  Observing the role of living bodies in supporting biogeochemical processes in the soil.  Designing strategies for managing soil functions in an effective, efficient and sustainable manner through managing the functions and roles of soil living organisms. |

1. When calculating contact time, each contact hour is counted as a full hour because the organisation of the schedule, moving from room to room, and individual questions to lecturers after the class, all mean that about 60 minutes should be counted.
2. Cf. European Commission: Proposal for a Recommendation of the European Parliament and the European Council on the establishment of the European Qualifications Framework for lifelong learning, COM(2006) 479 final, 2006/0163 (COD), Brussels 05/09(2006.

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| Content | 1. Pengantar Biologi Tanah 2. Habitat Tanah 3. Sifat kimia tanah 4. Kompoen biota tanah : jamur & mikoriza 5. Nutrisi, metabolisme & pertumbuhan biota tanah 6. Daur Fosfor 7. Meso dan mikrofauna tanah 8. Metodologi penelitian meso- dan mikrofauna tanah 9. Komposisi dan siklus karbon organik dan nitrogensilkus Sulfur 10. siklus nutrisi mikro dalam tanah 11. biologi tanah di tanah tergenang |
| Study and examination  requirements and forms of examination | Assesment Presentation/UTS/UAS |
| Media employed | Text, Presentation, Visual & Audio Web. |
| Reading list | 1. Jeffrey A. Baldock, J.A. 2007. Composition and Cycling of Organic Carbon in Soil. Dalam P. Marschner and Z. Rengel (Eds.). Nutrient Cycling in Terrestial Ecosystem. Springer. 409p. 2. McNeill, A. & Unkovich, M. 2007. The Nitrogen Cycle in Terrestial Ecosystem Dalam P. Marschner and Z. Rengel (Eds.). Nutrient Cycling in Terrestial Ecosystem. Springer. 409p. 3. Bunemann, E. & Condron, L.O. 2007. Phosporus and Sulphur Cycling in Terrestial Ecosystem Dalam P. Marschner and Z. Rengel (Eds.). Nutrient Cycling in Terrestial Ecosystem. Springer. 409p. 4. Rengel, Z. 2007. Cycling of Micronutrients in Terrestial Ecosystem Dalam P. Marschner and Z. Rengel (Eds.). Nutrient Cycling in Terrestial Ecosystem. Springer. 409p. 5. Marschner, P. 2007. Plant-Microbe Interactions in the Rhizophere and Nutrient Cycling Dalam P. Marschner and Z. Rengel (Eds.). Nutrient Cycling in Terrestial Ecosystem. Springer. 409p. 6. Craftumber, B.C. 2001. Biology of Wetland Soils. Dalam J.L Richardson dan M.J. Vepraskas (Eds.) Wetlandsoils: Genesis, Hydrology, Landscapes, and Classification. Lewis Publishers. Washington DC. 414p. |