

Module Name	Seed Processing
Module Level, if applicable	Advance
Code if Applicable	0420206005
Subtitle, if applicable	-
Courses, if applicable	0420206005 (Seed Processing)
Semester(s) in which the module is taught	6 (CoE)
Person responsible for the module	Aulia Zakia, SP., MSi.
Lecturer	Aulia Zakia, SP., MSi., and partners from seed industry
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Lecture, Project, Presentation, Independent learning, Lab work, Fieldtrip, Examination
Workload	<ul style="list-style-type: none"> • Lecture: 2 sks × 50 minutes × 16 weeks • Project: 2 sks × 60 minutes × 16 weeks • Independent Learning: 1 sks × 60 minutes × 4 weeks • Lab Work: 1 sks × 170 minutes × 6 weeks • Fieldtrip: 1 sks x 170 minutes x 6 weeks • Examination 2 hours x 60 minutes x 2 time
Credit points	SKS 3 SCH x (1.5) = 4.5 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none"> 1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	On successful completion in this course, student should be able to understand, explain, and perform seed/fruit reception, seed post-harvest process, seed sorting and grading, seed packaging and storage in warehouses, seed moisture content determination, seed physical quality testing: purity, seed physiological quality testing: germination in industrial scale.
Module Content	In this course, students learn about seed processing and quality testing, including seed drying, seed treatment before packaging, to seed packaging and storage. In addition, they also learn the process of seed quality testing, such as seed purity, germination, and determination of seed moisture content. This seed quality processing and testing course is a specialized knowledge and skills to prepare graduates to be ready to become practitioners or agropreneurs in the seed sector, especially in the field of Seed Quality Control.

Study and examination requirements and forms of examination	Cognitive: Midterm exam, Final exam, Quizzes, Assignments Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.
Media employed	Classical teaching tools with whiteboard and power point presentation
Recommended Literature	For Class A. Compulsory 1. Agrawal, R.L 1990. Seed Technology. Oxford & IBH Publishing Co. New Delhi. 2. Khan.A.A. 1992.The Physiolgy and Biochemistry of Seed Development. Dormancy and Germination.Elsivier Biochemical.Press. 3. Jusitce O.Land L.n. Bass. 1990.Priciple and Practices Storage. 4. Chin.H.F ang E.H Robert.1980.Recalcitrant Crops Seed.Tropical Press. Malaysia. 5. Mugnisja, W.Q dan A.Setiawan. 1990. Pengantar Produksi Benih. Rajawali Press. Jakarta. 6. Mugnisjah,W.Q dan A.Setiawan. 1995. Produksi Benih Bumi Aksara. Jakarta. 7. Mugnisjah, W.Q dan E. Munarni. 1990. Biologi Benih. Departemen Pendidikan dan Kebudayaan. Pusat Antar Universitas. IPB 8. Sutop.S. 1985 Produksi benih Rajawali.Jakarta. 9. Kuswanto.H.1996. Dasar-Dasar Produksi benih.Andi.Yogyakarta 10. Sadjad,S.1993. Dari Benih Kepada Benih.Gramedi.Jakarta. 11. Sadjad,S. 1999.Parameter Pengujian Vigor Benih. Grasindo. Jakarta. B. Option 1. Agarwal VK, Sinclair JB. 1997. <i>Principle of Seed Pathology</i> . Second edition. Boca Raton Florida (US): CRC Press Inc. 2. [BPMBTPH] Balai Pengembangan Mutu Benih Tanaman Pangan dan Hortikultura. 2004. Pengujian Mutu Benih Tanaman Pangan dan Hortikultura. Depok (ID): Direktorat Perbenihan. Direktorat Jenderal Bina Produksi Tanaman Pangan. 3. Copeland LO, McDonald MB. 2001. <i>Principles of Seed Science and Technology</i> . 4 th edition. London (GB): Kluwer Acad. Publish.

	<ol style="list-style-type: none"> 4. Ilyas S. 2012. <i>Ilmu dan Produksi benih (Teori dan Hasil-hasil Penelitian)</i>. Bogor (ID): IPB press. 5. [ISTA] International Seed Testing Association. 2014. <i>International Rules for Seed Testing</i>. Basserdorf (CH): ISTA. 6. Widajati E, Muriati E, Palupi ER, Kartika T, Suhartanto, MR, Qodir A. 2014. <i>Dasar Ilmu dan Produksi benih</i>. Bogor (ID): IPB Perss. 7. Various related journals (most recent 10 years). 8. Various related textbooks.
Date of Last Amendment	23 rd August 2022