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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p style="text-align: center;"><b>Module Description/Course Syllabi</b></p> <p>Study Program : Bachelor Program<br/>(S1) Faculty of Agriculture<br/>University of Andalas</p> |
| <b>1. Course number and name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                               |
| PIN621 05 Experimental Design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                               |
| <b>2. Credits and contact hours/Number of ECTS credits allocated</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                               |
| 3 credits / 4.53                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                               |
| <b>3. Instructors and course coordinator</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                               |
| <ol style="list-style-type: none"> <li>1. Prof. Dr. Ir. Herviyanti, MS</li> <li>2. Prof. Yulnafatmawita M.Sc</li> <li>3. Dr. Ir. Gusnidar, MP</li> <li>4. Dr. Ir. Agustian</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                               |
| <b>4. Text book, title, outhor, and year</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                               |
| <ol style="list-style-type: none"> <li>1. Gaspersz, V. 1994. Experimental Design Method. Armico, Bandung</li> <li>2. Gomez. 1995. Statistical procedures for agricultural research. Translation by Syamsuddin, E. and J. S. Baharsyah. UI Press. Jakarta, 698 pages.<br/><a href="#">Statistical Procedures for Agricultural Research - Kwanchai A. Gomez, Arturo A. Gomez - Google Buku</a></li> <li>3. Reza Hoshmand · 2018. Design of Experiments for Agriculture and the Natural Sciences<br/><a href="#">Design of Experiments for Agriculture and the Natural Sciences - Reza Hoshmand - Google Buku</a></li> <li>4. Robert George Douglas Steel, James Hiram Torrie, David A. Dickey · 1997. Principles and Procedures of Statistics<br/><a href="#">Principles and Procedures of Statistics: A Biometrical Approach - Robert George Douglas Steel, James Hiram Torrie, David A. Dickey - Google Buku</a></li> <li>5. Staad 8 software, and othe software that supports. <a href="#">RAM   STAAD   ADINA Blog - STAAD.Pro V8i SELECTseries 6 - Communities (service-now.com)</a></li> <li>6. Syahni, R. 1992. Experiment Design. Diktat, Unand Research Center. Padang</li> <li>7. Dean, A and Voss, D. 1999. Design and Analysis of Experiments. Springer-Verlac. New york Inc. <a href="#">(PDF) Design and analysis of experiments (researchgate.net)</a></li> </ol> |                                                                                                                                                                               |
| <b>5. Specific course information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                               |
| <b>A. Brief description of the content of the course (catalog description)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                               |

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| The Experiment Design course aims to provide students with the ability to design an experiment in carrying out a research, especially in completing the final project and being able to interpret the data obtained so as to make it easier to draw conclusions from the research that has been carried out, especially in writing the final project.                                                                                                                                                                                   |
| <b>B. Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| First Cycle Bachelor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>C. Semester when the course unit is delivered</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Even Semester                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>D. Mode of delivery (face-to-face, distance learning)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Face to face                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>6. Intended Learning Outcomes (CPL)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>ILO-1:</b> Able to apply basic agricultural sciences widely in overcoming agricultural problems for sustainable agricultural development (P)</p> <p><b>P1.3.</b> Apply basic sciences and soil science in solving land and environmental problems for agricultural development</p> <p><b>ILO-5:</b> Able to keep up with the latest knowledge and apply it to support appropriate learning strategies</p> <p><b>P5.1 :</b> Review the literature and the novelty of technological knowledge on soil and environmental science</p> |
| <b>7. Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.</b>                                                                                                                                                                                                                                                                                                                                                                                        |
| 1. Apply basic sciences and soil science in solving land and environmental problems for agricultural development                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2. Review the literature and the novelty of technological knowledge about soil and environmental science                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>8. Learning and teaching methods</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Cooperative Learning and Problem Based Learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>9. Language of instruction</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Indonesian                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>10. Assessment methods and criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>Summative Assessment :</b></p> <ol style="list-style-type: none"> <li>1. Assignment</li> <li>2. UTS</li> <li>3. UAS</li> <li>4. Internship</li> </ol> <p><b>Formative Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Minutes paper</li> </ol>                                                                                                                                                                                                                                                                      |