



## Module Description/Course Syllabi

Study Program : S1 Undergraduate Program  
 Faculty of Agriculture  
 University of Andalas

<b>1. Course number and name</b>	
PIT612 09 Radioisotope Techniques in Soil and Plant Studies	
<b>2. Credits and contact hours/Number of ECTS credits allocated</b>	
3 credits (2 classes, 1 practicum)	
<b>3. Instructors and course coordinator</b>	
Prof. Dr. Ir. Yulnafatmawita Dr. Ir. Gusnidar, MP	
<b>4. Text book, title, outhor, and year</b>	
<ol style="list-style-type: none"> <li>1. Hadarson.G.A. 1989. The Use of Nuclear Technique in studies of Soil and Plant Relationship. Vienna</li> <li>2. L'Annunziata, M.F. 1987. Radionuclide Traces :Their Detection and Measurement. Acad.Press.</li> <li>3. London Vose, P. E. 1980. Introduction to Nuclear Technique in Agronomy and Plant Biology. Pergamon</li> <li>4. Press. Frankfurt Yulnafatmawita, 2009. Radio isotope techniques in soil-plant studies. Student Manual. Yulnafatmawita, N. Hakim, and Gusnidar. 1993. Radioisotope technique practicum guide for soil and plant studies. Faculty of Agriculture, Andalas University, Padang.</li> </ol>	
<b>5. Specific course information</b>	
<b>A. Brief description of the content of the course (catalog description)</b>	
ISOTOPE RADIO TECHNIQUE IN THE STUDY OF SOIL-PLANT RELATIONSHIP (TRI) is so that students of the Department of Soil of the Faculty of Agriculture know ISOTOPE RADIO ENGINEERING as a complement (complementary) to conventional methods in studying soil and plant relationships, especially in terms of fertilizer and fertilization.	
<b>B. Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)</b>	
First Cycle Bachelor	
<b>C. Year of study when the course unit is delivered (if applicable)</b>	
2nd Year	
<b>D. Semester when the course unit is delivered</b>	
Even Semester	
<b>E. Mode of delivery (face-to-face, distance learning)</b>	
Face to face	
<b>6. Intended Learning Outcomes (CPL)</b>	
LO-3: Able to use various methods for soil and crop analysis appropriately in land resource management PI 1 : Using laboratory equipment for soil analysis and follow-up plants with SOP PI 2: Able to analyze soil and plants precisely, meticulously using the latest methods	
<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. Using laboratory equipment for soil analysis and milk crops with SOPs
2. Able to analyze soil and plants precisely, meticulously using the latest methods
<b>8. Learning and teaching methods</b>
Cooperative Learning and Case Method Learning
<b>9. Language of instruction</b>
English
<b>10. Assessment methods and criteria</b>
<b>Summative Assessment :</b> 1. Assignment 2. UTS 3. UAS 4. Internship <b>Formative Assessment:</b> 1. Thumb up and thumb down 2. Minutes paper