

Subject Module
 Department of Agrotechnology
 Faculty of Agriculture
 University of Islam Malang



Module Handbook

Module Title	Urban Farming
Module Level, if available	Undergraduate Program
Subject Code	MKP 60608
Headings, if available	-
Subject (MK)	Urban Farming
Semester	7
Course Coordinator	Ir. Indiyah Murwani, MP
Teaching Team	-
Language of instruction	Indonesian or English
Linkages with the Curriculum	Study Program: Agrotechnology Specialization: Agrotechnology Type: Compulsory /Elective
Learning Methods and Duration	<ol style="list-style-type: none"> 1. Lecture: 100 minutes/meeting (14 meetings) 2. Structure assignments/individual and group assignments presentation
Student Study Load	<ol style="list-style-type: none"> 1. Lecture: 100 minutes/meeting (14 meetings) 2. Assignments/quiz/group presentation 3. Attendance: 75% of total attendance
Credit Weight	2 credits
Requirements for Passing the Course	<ul style="list-style-type: none"> • Attendance >75% • The final score of all components of learning evaluation >44 The component of score: <ul style="list-style-type: none"> • 30% midterm exam • 30% final exam • 30% Assignments (individual and group) • 10% presence
Prerequisite Subjects	TBT Horticulture
Learning Outcomes	The expected learning outcomes are: <ol style="list-style-type: none"> 1. Have an attitude of creative and innovative thinking in their work in accordance with professional ethics in the field of agriculture (ILO 1) 2. Have good and deep knowledge in the field of basic agricultural science that supports Agro-technology (ILO 3) 3. Able to work independently or in a team, and use various methods of communication. (ILO 4) 4. Able to solve problems that arise in the field of Agro-technology and related fields of science (ILO 5).

Learning Content

After completing this course, students are be able to:

1. Understand theoretical concepts that support the Urban Farming course.
2. Be able and have skill in designing Tabulampot
3. Be able and have skill in designing Verticulture
4. Be able and have skill in designing Bumina and Yumina
5. Be able and have skill in designing Hydroponic Farming

The topics include:

1. Introduction

- Definition of Urban Agriculture
- Target of Urban Farming
- The Positives of Urban Farming and Its Weaknesses

2. Tabulampot

- Definition of Tabulampot
- Advantages and Disadvantages of Tabulampot
- Stages of Tabulampot

3. Starfruit and Durian Tabulampot

- Flowering starfruit
- Fruit Selection
- Fertilization
- Selection of durian seeds
- Media replacement and fertilization

4. Verticulture

- Definition of Verticulture
- Advantages and Disadvantages of Verticulture
- Designing of Vertical Buildings
- Creating a Nursery and Planting

5. Management of Yard

- Yard and Its Benefits
- Factors Influencing of Yard Development
- Problems in Yard Development and How to Overcome Them
- Potential for Yard Production

6. Yumina dan Bumina

- Definition of Bumina and Yumina
- Advantages of Yumina and Bumina
- System of Yumina and Bumina

7, 9 &10 Method of Assembling a Hydroponic System

- System of Gericke
- System of Floating Raft
- NFT
- DFT
- Ebb and flow
- System of Wicks
- System of Benggala
- Meitleider City grounds

11. Household Waste Management

12. Hydrogenic

13. Recognize Concept of Sustainable Food House

- System
- Commodity Selection
- Development Implementation

14. Urban Agriculture Implementation Planning

Test Terms and Forms	<p>Examination requirements: A minimum of 75 % attendance to attend the final exam</p> <p>Forms of examination: Essay</p>
Learning Media	<p>Projector and screen, Zoom application, Google Classroom, WhatsApp Group</p>
References	<p>References :</p> <p>Main references</p> <ol style="list-style-type: none"> 1. Febri dan Leni. 2017. Urban Farming, Bertani Kreatif Sayur, Hias dan Buah. Penebar Swadaya. Jakarta Timur. <p>Supporting references</p> <ol style="list-style-type: none"> 1. Soeseno S, 1993. Becocok Tanam Secara Hidroponik. PT Gramedia Pustaka Utama Jakarta. 117 hal. 2. Pinus, 1996, Hidroponik. Bercocok Tanam Tanpa Tanah. Penebar Swadaya Jakarta. 99 hal. 3. Alex S. Sayuran Dalam Pot. Sayuran Konsumsi Tak Harus Beli. Pustaka Baru Press. Yogyakarta. 4. Liferdi L dan Cahyo Saporinto. 2016. Vertikultur Tanaman Sayur.