

Department of Biology,  
Faculty of Mathematics and Natural Sciences, Andalas University  
Kampus UNAND Limau Manis Padang, West Sumatra, 25163  
Email : [biologi@fmipa.unand.ac.id](mailto:biologi@fmipa.unand.ac.id)

<http://biologi.fmipa.unand.ac.id/>



## Undergraduate Biology Study Program

# PROFILE



DEPARTMENT OF BIOLOGY  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
ANDALAS UNIVERSITY



## DRAFTING TEAM

Chief : M. Nazri Janra, M.Si, MA.

Secretary : Ahmad Taufiq, M.Si.

Staff : - Dr. Mairawita

- M. Idris, M.Si.

- Suwirmen, MS.

- Dr. Indra Junaidi Zakaria

- Dr. Putra Santoso

- Dr. Henny Herwina

- Dr. Rizaldi

- Dr. Wilson Novarino

- Dr. Nurainas

- Dr. Aadrean

- Roni Kurniawan



# PROFILE

**Department of Biology**

**Undergraduate Biology Study Program**





## Foreword

The Undergraduate Biology Study program which belong to Biology Department of Andalas University has been 55 years old this 2017. This department is one of four departments in Faculty of Mathematics and Natural Science, Andalas University. During the period it runs, it has built a robust academic tradition, which supported by facilities and infrastructures provisioned to assist the development of integrative and multi-party cooperation toward education, research and social service, as well as improving academic atmosphere and productivity, in which the students' life become more creative, innovative and competitive. It has vision "To be an excellent study program in studying, utilizing, and conserving the tropical biodiversity to generate competitive graduates at the level of ASEAN in 2028 ."

The Undergraduate Biology Study Program obtained "Accreditation A" from National Accreditation Board - Higher Education (BAN-PT) for five consecutive periods. Currently, this program is preparing for the ASEAN level accreditation through ASEAN University Network - Quality Assurance (AUN-QA). This program expects' to be recognized broadly at the ASEAN level and its graduates are able to compete at the regional level of Asia.

Department of Biology has designed multiple methods for improving the capacity building through various trainings which relate to specific expertise. Its goal is not only to train the internal human resource (teaching staffs, students), but also goes further externally by involving many communities from surrounding municipalities and villages in West Sumatra and beyond. It serves as the implementation of community outreach by providing various training materials to society. Enhancements input and process have become focal attention to achieve the optimum quality of output and outcome. All of the agenda mentioned above, together with academic activities (improvement the quantity and quality of research, seminar, scientific articles, journal and book publishing) are expected to bring the Undergraduate Biology Study Program, Andalas University gets closer to become the leading program at ASEAN level in 2028.

Dr. Mairawita  
(Head of Department of Biology)





Foreword	iii
Vision, Missions and Objectives	1
Specification for Undergraduate Biology Study Program	2
Course Distribution per Semester	4
Course Description	7
Lecturers and Academic Supporting Staffs	19
Laboratories and Supporting Facilities	21





## Vision, Missions, and Objectives

### Vision:

To be an excellent study program in studying, utilizing, and conserving the tropical biodiversity to generate competitive graduates at the level of ASEAN in 2028

### Missions:

- To carry out qualified education with uniqueness of tropical biodiversity to generate competitive graduates on ASEAN level,
- To conduct researches on biodiversity and to conserve biological resources, in order to achieve international publications and intellectual property rights,
- To conduct community services based on research outcomes toward welfare of communities,
- To escalate mutual benefits from collaboration with various stakeholders in promoting education, research, and community services (Tridharma Perguruan Tinggi).

### Objectives:

- To nurture excellent graduates with uniqueness of tropical biodiversity at the level of ASEAN,
- To publish at international level the results of research on tropical biodiversity and to obtain intellectual copyrights,
- To implement the appropriate research outcomes for welfare of communities,
- To obtain the collaboration with stakeholders in promoting Tridharma Perguruan Tinggi.





## Specification for Undergraduate Biology Study Program

Program Name	Undergraduate Biology Study Program Department of Biology, Faculty of Mathematics and Natural Sciences, Andalas University
Year of Establishment	1962
Accreditation Level	A, Decree no. 4301/SK/BAN-PT/Akred/S/X1/2017
Graduate Profiles	Biological Researcher (Botanist, Zoologist, Conservation-ist), Consultant (environment, gardening landscape), Technical Expert (gardening, forest, coastal, fisheries and ecotourism), Functional staff (quality control on food and beverage, pathology anatomy, environment quality control)
Teaching and learning methods	Teaching and learning process are characterized by interactive, collaborative and student-centered learning
Assessment methods	Learning outcome assessments cover; 1) soft skills, attitudes and core values, 2) knowledge and 3) psychomotor. Assessment methods include observation, participation, writing test, practical exam, and interview. Learning process are assessed using rubrics, and learning outcomes are assessed using portfolios
Total Credit Hours	144
Duration of Study	8-14 semester

## Expected Learning Outcome (ELO)

1. Accepting the diversity of society and implement academic value, norms and ethics,
2. Building-up the spirit of entrepreneurship,
3. Mastering and applying the concept and principle of biological theory along with its uniqueness in biodiversity and bio-conservation,
4. Comprehending the basic concepts of chemistry, physics, mathematics and information technology which support biological sciences,
5. Being able in using instruments and related methods in observing and measuring biological objects,
6. Being able in planning and conducting studies in order to utilize and conserve biological resources,
7. Possessing domain of soft skills in team-work, communication, critical and creative thinking.
8. Being able to process learning sources into learning materials and scientific information.



# Course Distribution Per Semester

Code	Course	Credit
<b>Semester 1</b>		
BIO 4001	Biological Perspective	2
BIO 4002	Introduction to Biodiversity	2
BIO 4101	Basic Taxonomy	2
BIO 4102	Plant Morphology	3
BIO 4003	Laboratory and Field Biology Techniques	2
BIO 4004	Chemistry	3
BIO 4005	Mathematics	2
SSE 129	English I	2
<b>Semester 2</b>		
BIO 4103	Plant Systematics	4
BIO 4201	Plant Structure and Development	3
BIO 4601	Introduction to Cell Biology and Biomolecular	3
BIO 4501	Microbiology	3
BIO 4502	Biochemistry	4
BIO 4006	Bioethics	2
HKU 141	Religions	2
<b>Semester 3</b>		
BIO 4104	Animal Systematics	4
BIO 4202	Animal Structure	3
BIO 4301	Plant Physiology	4
BIO 4007	Fundamental of Bioprospecting	2
BIO 4008	Evolution	2
BIO 4009	Physics	3
HKU 101	Pancasila (The Five Principles)	2
<b>Semester 4</b>		
BIO 4203	Animal Development	3
BIO 4401	Animal Ecology	3
BIO 4402	Plant Ecology	3
BIO 4602	Genetics	4
BIO 4010	Laboratory Management	2
HKU 151	Nationality	2
BIO 4011	English II	2

<b>Semester 5</b>			
BIO 4302	Animal Physiology	4	
BIO 4012	Bioconservation	3	
BIO 4403	Biomonitoring	3	
BIO 4013	Research Methodology	2	
SSI 122	Bahasa	2	
BIO*	Elective Course 1	3	
BIO	Elective Course 2	3	
<b>Semester 6</b>			
BIO 4014	Scientific writing	2	
BIO 4015	Biostatistics	3	
BIO 4016	Enterpreneurship	2	
UND	Student community service program	4	
BIO	Elective Course 3	3	
BIO	Elective Course 4	3	
BIO	Elective Course 5	3	
<b>Semester 7</b>			
BIO 4017	Biocomputation	3	
BIO 4018	Seminar I	1	
BIO	Elective Course 6	3	
BIO	Elective Course 7	3	
BIO	Elective Course 8	3	
BIO	Elective Course 9	3	
BIO 4019	Internships	3	
<b>Semester 8</b>			
BIO 4020	Seminar II	1	
BIO 4021	Final Project (Thesis)	6	
		<b>Total</b>	<b>144</b>

BIO\*: Elective courses offered by Study Program (Attached)



## Course Description

### Introduction to Biodiversity

This course covers biodiversity definition, the importance of biodiversity, ecosystem diversity, animal and plant diversity. It gives examples on genetic diversity based on phenotype and genotype. It explains about factors that support biodiversity, scientific foundation in managing biodiversity, degradation on biodiversity and impact of biotechnology on biodiversity. Finally, it relates the students with Indonesian National Regulation concerning biodiversity.

### Fundamental of Bioprospecting

Students learn to browse systematically, classify, and investigate of novel sources for chemical compounds, genes, protein, microorganisms and other products from available biodiversity for commercial purposes by considering actual and potential economic values.

### Bioconservation

The course engage students to understand the main problem in conservation that relate to biodiversity and application of biology principles (i.e. population genetic, biogeography, community ecology). Students will also learn methodology and management system used in conserving biodiversity; i.e. policy, regulation and convention in conserving biodiversity, global, national and local effort and strategy in biodiversity conservation, species and habitat conservation and case study on conservation action in the past.

### Biomonitoring

Biomonitoring is a discipline that used to monitor the quality of polluted environmental by determining any organism categorized as bioindicator. By identifying bioindicator from various ecosystem, environmental quality can be determined. Discussing general aspects and integrative approach in biomonitoring; concepts of biomonitor, bioindicator, biomarker; international program for biomonitoring; bioindicator and ecosystem management; biomonitoring and environmental conservation.

### Laboratory and Field Biology Techniques

This course will lay the basic on fundamental field techniques and lab equipment operation to support field and laboratory research in Biology. Course materials consists of basic understanding and operating of Global Positioning System (GPS), getting familiar with maps, management of field study, techniques in processing animal and plant specimen, basic techniques in photography for biodiversity, introduction to lab equipment, lab safety, general characteristics of chemical substances used. After passing the course, the students are hoped to be able to manage their own field research (including sampling process), using supporting equipment in field and laboratory research, develop teamwork skill and capable to operate lab equipment as well precisely and safely using chemical substance in the laboratory.



### Mathematics

Introductory lectures on assemblage, function and graphic, limits and continuity of a function. Several functions related to biology discipline, such as a function that depict the growth rate of certain population. Derivate of a function along its application in biology discipline. Integral of a function with its application in biology discipline.

### Chemistry

Understanding the principle of chemistry: atom structure, characters of atom in periodics system, chemical bound, chemical thermodynamics, chemical kinetic, chemical equilibrium, marine chemistry and applicative chemistry (in environment, etc).

### Physics

Identify physical phenomenon's around the mechanical of point, circular movement, wavy movement, calorie and thermodynamics, geometry and physics of optic, electricity and magneticity, modern physic

### Biostatistics

Boundary and coverage of parametric statistic methods, homogeneity test, normality test; experimental design, hypothesis formulation and testing, sampling method, multiple comparison variance analysis, regression and correlation, association, non parametric statistic methods.

### Biochemistry

It explains physical and chemical properties of compound that build organism, basic concept and role of biomolecule such as carbohydrate, lipid, protein, nucleate acid, vitamin, hormon. It also discusses bioenergetics and kinetic of enzymes.

### Biocomputation

This course discuss about processing and simulating biological data by using programs and software's, offline and online. Included in this data are the ecology, taxonomy, physiology, genetics and molecular. Programs used in this course range from SPSS, MVSP, NTsys, Past, GIS, Bioedit, Mega or those that can be accessed online, such as NCBI and others

### Scientific Writing

The purpose of the course is to nurture the ability of students to publish their research. Through this course, last year students will learn about dissemination of their research through various type of writing and scientific presentation. Course materials involves report writing for their research, scientific writing and publication process through periodical scientific journal and proceeding, preparing material for oral and poster presentation. Included in this course; abstract and resume writing in English.

### Biological Perspective

After having this course, students are expected to understand the holistic aspects on biology discipline, including its actual applications on real life and employment opportunities for the graduatee. Through the course, students are encouraged to comprehend the coverage of biology discipline, description of research and up to date invention in the field of biology, approach and role of biology from the interdisciplinary standpoint in resolving actual problems on environment and biodiversity. Within this course, students are also motivated to have creativity and perform at their best whenever they graduate from the program.

### Bioethics

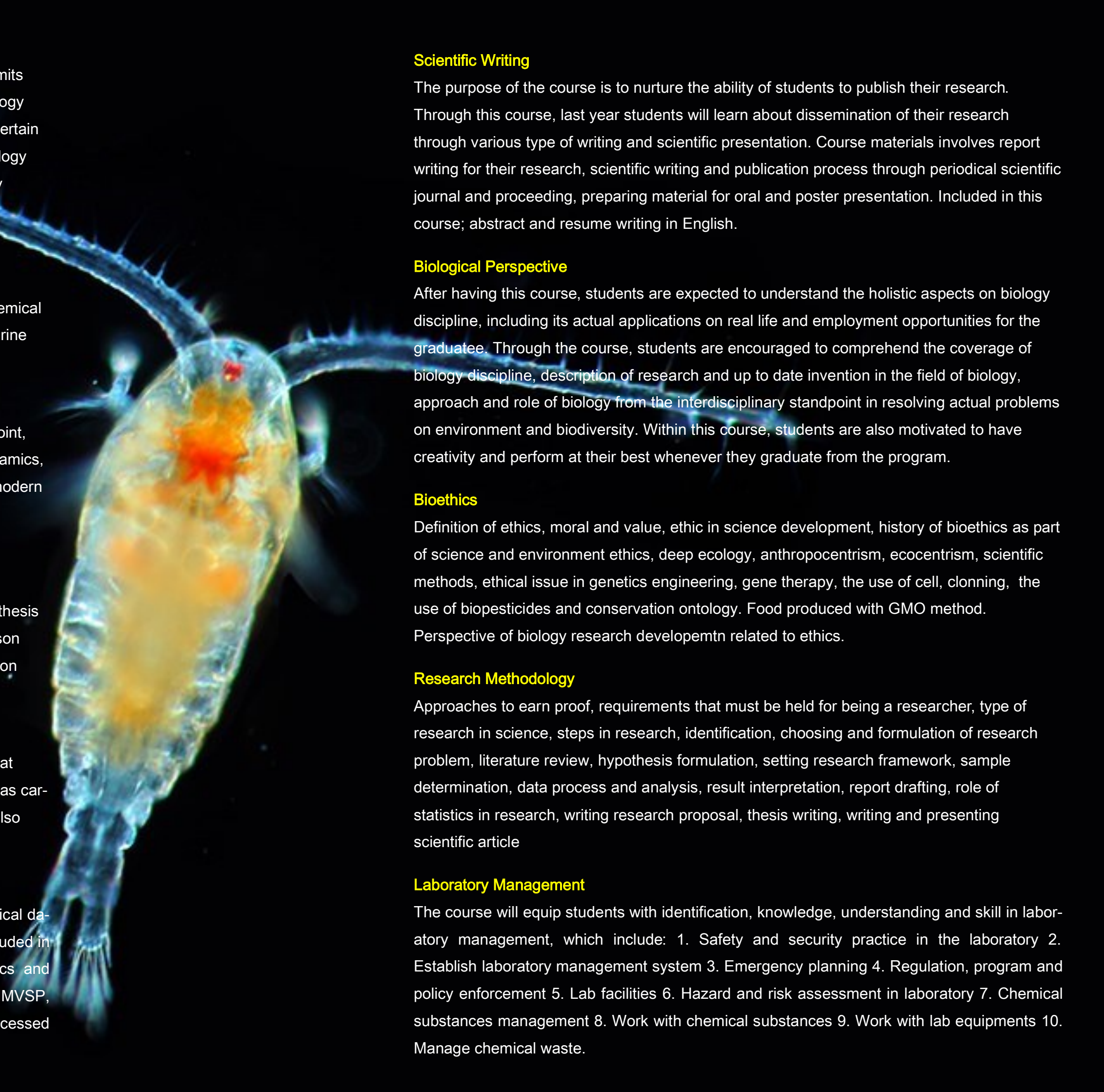
Definition of ethics, moral and value, ethic in science development, history of bioethics as part of science and environment ethics, deep ecology, anthropocentrism, ecocentrism, scientific methods, ethical issue in genetics engineering, gene therapy, the use of cell, cloning, the use of biopesticides and conservation ontology. Food produced with GMO method. Perspective of biology research developemtn related to ethics.

### Research Methodology

Approaches to earn proof, requirements that must be held for being a researcher, type of research in science, steps in research, identification, choosing and formulation of research problem, literature review, hypothesis formulation, setting research framework, sample determination, data process and analysis, result interpretation, report drafting, role of statistics in research, writing research proposal, thesis writing, writing and presenting scientific article

### Laboratory Management

The course will equip students with identification, knowledge, understanding and skill in laboratory management, which include: 1. Safety and security practice in the laboratory 2. Establish laboratory management system 3. Emergency planning 4. Regulation, program and policy enforcement 5. Lab facilities 6. Hazard and risk assessment in laboratory 7. Chemical substances management 8. Work with chemical substances 9. Work with lab equipments 10. Manage chemical waste.







### Animal Systematics

The course will discuss about definition of systematics, taxonomy and classification; history of animal systematics; the importance of animal systematics for community. Evolutionary process and phylogeny reconstruction as basis for animal systematics. Principles of animal taxonomy, 3 (three) primary methods in taxonomy, taxonomy of Kingdom Animalia and animal diversity; taxonomy of Phylum Porifera and Phylum Cnidaria; taxonomy of Phylum Platyhelminthes and Phylum Nematoda; taxonomy of Phylum Mollusca; taxonomy of Phylum Arthropoda; taxonomy of Insecta; taxonomy of Phylum Annelida; taxonomy of Phylum Echinodermata; taxonomy of Phylum Chordata and Superclass Pisces; taxonomy of Class Amphibia and Reptilia; taxonomy of Class Aves; taxonomy of Class Mammals.

### Animal Structure

This course will give lectures on the understanding of body pattern and symmetry, organization of animal trunk, types of basic tissue, integument, muscular, skeleton, respiratory system, digestive system, circulation system, excretion and reproduction systems, nerve system, endocrine, sensing organs, development and growth of vertebrates (gametogenesis, fertilization, segmentation, blastula, gastrula, neurulation, extraembryonal membrane and placenta).

### Animal Development

Theory and concepts of development, gametogenesis: Oogenesis and Spermatogenesis, penetration, fertilization and polysperm blocking, segmentation and cleavage types, gastrulation; morphometric movement and gastrula type, embryonic adaptation, extraembryonal membrane and placentation, neurulation, differentiation; segregation and integration of cytoplasm, Organogenesis, growth, metamorphosis, regeneration and abnormality of development.

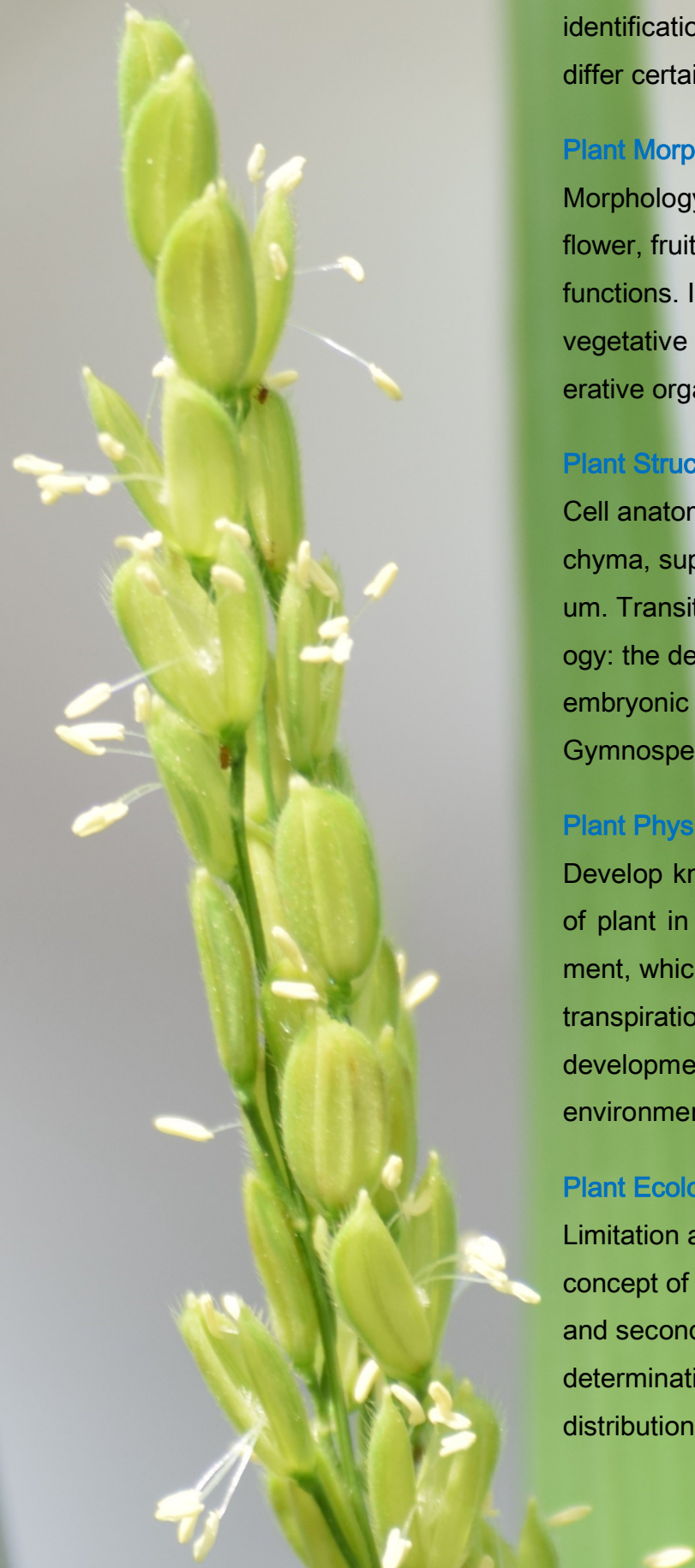
### Animal Physiology

Explaining about cell as the smallest unit in doing live function and bio-membrane transport. Comparatively discussing physiological functions from unicellular organisms to multicellular and complex organisms, along with their organ compositions. Including about physiological process and its organ in digestive system, osmoregulation and excretion systems, circulation system, transport O<sub>2</sub>/CO<sub>2</sub> and respiration, nerve system, muscular system, reproduction system and endocrine system.

### Animal Ecology

The course consist of theory in the classroom and lab practice. Theoretical lecture is started with the understanding on basic concept and background of ecology, environmental factors, concept of habitat, concept of animal population and community, population dynamics, interaction between and among species, succession of animal community, feeding ecology, behavioral ecology, arable land ecology and conservation ecology. Lab materials are acustomized according to the theoretical lectures, either performed in classroom, laboratory or in the field.





### Plant Systematics

This course will give knowledge and ability for students to identify, classify plant species; to prepare dried and wet specimen, as well to take the documentation on plant species through the field survey, lab session and fieldwork. Lecture consists on identification of typical and important characters used in identifying and grouping Angiosperms, Gymnosperms, ferns, mosses, lichens and algae. Expected outputs from this course are the students understand the process in plant identification, comprehend how to use nomenclature for plant, recognize important characters to differ certain taxa and capable to make representative plant specimens for floristic study.

### Plant Morphology

Morphology, basic structure and terminology of spermatophytes, covering leaf, stalk, bark, root, flower, fruit, seed and sprout. Structural modification on plant will be discussed in conjunction with functions. It also discuss about phytotaxis and architecture of plants. Lab session: Introduction on vegetative organs: root, stalk, leaf and additional organ. Student will also get familiarized with generative organs: flowers, fruits and seeds.

### Plant Structure and Development

Cell anatomy; wall and parts of protoplast. Meristematic and permanent epidermal tissue, parenchyma, supportive tissue, transporting tissue, secretion tissue, vesicular cambium and cork cambium. Transitional region. Primary plants and effects of secondary growth on primary body. Embryology: the development of reproduction instruments, sporogenesis, gametogenesis, fertilization and embryonic development of Angiosperms. Comparison of reproduction instrument on Angiosperm, Gymnosperm and ferns.

### Plant Physiology

Develop knowledge and understanding regarding natural occurrence takes place within the body of plant in conjunction with process and function, along with how plant response to its environment, which covers: concepts of plant physiology, relationship between water and plants, nutrition, transpiration, respiration, photosynthesis, metabolism of nitrogen and lipid, growth and development, growth hormones, movement on plants, dormancy, photoperiodism and environmental physiology.

### Plant Ecology

Limitation and coverage of ecology and its relationship with other disciplines. Principles and concept of ecosystem, individual, population and community. Classification of ecosystem, primary and secondary succession, population interaction, eco-energetics. Observation techniques, determination of number and amount of sampling, sampling techniques, determination of biota's distribution pattern. Analysis on biota, association and intraspecific crowding.



## Microbiology

Lead students to understand the development, theory and limitation in microbiology. Knowing history and introducing them to methodologies used in it. It also learns how to group microbials according to their way of live, classification, morphology, structure, physiology, role, form; as well the possible application of processes induced by the growing activities from microorganism related to environment, health, food, industry or as disease cause.

## Genetics

Introduction (variation and mutation), reproduction cycle, Mendellian genetics (segregation and independent linkage), probability-statistic X<sup>2</sup> test, double allele and domination relationship, genes interaction, study on twin and environmental effect, sex determination and sex-linkage, parental effects and cytoplasmic inheritance, quantitative characters, linkage and cross-link, gene mapping, recombination (some examples on microorganisms)

## Evolution

Definition of evolution, evolution theory and its development, proofs of evolution, variability and genetic polymorphism. Natural selection, Darwin's hypothesis, adaptation process, mechanism and process of speciation. Evolution in molecular level all the way through mammals.

## Entrepreneurship

Introduction, Indonesia condition from entrepreneurship perspective, challenge for independent entrepreneurship. Definition and elements of entrepreneurship, life skills, development of entrepreneurship in Indonesia, development of entrepreneurship mentality, typical characteristics of successful entrepreneur, entrepreneurship experience, business idea, business planning, getting started with business. Tips and tricks in doing business.

## Student Community Service Program

Community Service Program is a course initiated by Andalas University by mandating its students to serve in destined villages in Indonesia, which in this late years extended to the region in South-east Asia. A mixed compound of students from different programs and faculties is asked to implement skills and knowledge they learn in the class and work together to solve the real problems within the community.

## Internships

This course which conducted in either research institutes or state and private institutions. Internship purposes to increase skills, comprehend the methodology and ability to operate laboratory instrument, biological analysis on result gained in internship activity, extent the insight on working sectors. It also applies biology and its related skills into relevant fields.

## Religions (Islamic)

Definition of Islamic teaching and its differences with other religion, human and religion, Creator and creatures, faith, monotheism of Islam, Islamic shari'a, Islamic morals, Islam and science disciplines.

## Pancasila (The Five Principles)

Introduction; definition of Pancasila term, overview on the history of formulation of State Principles; Pancasila in the draft of Indonesia Basic Constitution and other ever applied legislation in the country; Independent Proclamation of Indonesia; several functions of Pancasila; relationship between Pancasila, Independent Proclamation and Preamble of Constitution 1945; State Governmental System; human rights and Pancasila; Democracy of Pancasila and National Development.

## Nationality

Introduction, national identity, citizenship, constitution, democracy, local autonomy, good governance, human rights, civilized society.

## Bahasa

Introduction; learning the meaning of scientific project, type of scientific project, structure of scientific writing, diction or word choice, learn using effective sentence, understanding the definition of paragraph, requirement of good paragraph, topic choice, topic limitation, topic determination, objective determination, thesis and purpose expression, theme choice, comprehend writing framework, citation techniques, footnote, literature cited, understand how to make summary, review.

## English I

Parts of speech; Tense, Passive voice, Time signals; Calauses: Reading for the main idea; Techniques and concepts of writing, Logical signals; Reading: Description (expressing structure the human skleton), Explanation (expressing cause and effect "Disease"), Comparison (expressing differences "Plant and animals"); Skeaking: a. Starting the differences between description & explanation, using various examples; b. Stating the differences between comparison and contrast, using various examples; Writing reports paper: Applying description, explanation & comparison strategy.

## English II

Introduction about the strategy study in University; Reading ability related to biology issues, writing activity, English for science and technology, beginning scientific English, speaking related to interview and discussion, listening activity.



## Elective Courses offered by Study Program \*

- Animal Systematics; Animal Cytotaxonomy, Protozoology, Parasitology, Entomology, Insects Pollinator, Taxidermy, Vertebrate Biology, Wildlife Conservation, Ethnozoology, Zoogeography
- Plant Systematics; Plant Specimens Management, Morphology of Pollens and Spores, Botanical Economy (Ethnobotany), Morphometric, Plant Cytotaxonomy, Phytoindicators, Phytogeography, Phylogeny of Vascular Plants, Taxonomy Of Selected Plant Taxa, Identification on Seeds and Seedlings
- Animal Ecology; Biology of Fishery, Biology of Benthos, Planktonology, Malacology, Primatology, Animal Behavior, Marine Biology, Soil Biology, Freshwater Ecology, Geographical Information System
- Plant Ecology; Forest Ecology, Terrestrial Ecology, Environmental Impact Assessment, Weed Science, Rural Ecology, Urban Forest, Agroecology, Ecotourism, Dendroecology, Human Ecology
- Animal Structure and Development; Animal Microtechnique, Teratology, Animal Morphogenesis, Animal Reproduction Biology, Histopathology, Animal Tissue Culture, Developmental Physiology, Animal Anatomy
- Plant Structure and Development; Plant Morphogenesis, Plant Microtechnique, Biology of Fibers, Plant Structures and Adaptations, Plant Reproductive Biology, Biology of Wood, Dendrochronology
- Animal Physiology; Endocrinology, Neurophysiology, Hematology, Insect Physiology, Pest Control, Toxicology, Nutritional Physiology, Animal Ecophysiology
- Plant Physiology; Plant Tissue Culture, Plant Metabolism, Plant Nutrition, Biology of Mycorrhiza, Plant Ecophysiology, Seed Physiology, Phytohormones
- Microbiology; Industrial Microbiology, Mycology, Bacteriology, Environmental Microbiology, Food Microbiology, Medicinal Microbiology, Microbiology of Rhizosphere, Microbial biotechnology, Phytopathology, Food Preservation Technology
- Genetics; Cytogenetics, Quantitative/Population Genetics, Molecular Genetics, Genetical Markers, Human Genetics, Radiobiology, Fundamental of Breeding







## Lecturers and Academic Supporting Staffs

### Lecturers

- Aadrean, Dr.
- Ahmad Taufiq, M.Si.
- Anthoni Agustien, Dr.
- Chairul, Dr.
- Dahelmi, Prof. Dr.
- Dewi Imelda Roesma, Dr.
- Djong Hon Tjong, Dr.
- Efrizal, Dr.
- Erzal Mukhtar, Prof. Dr.
- Faskaharny Alamsjah, Dr.
- Fuji Astuti Febria, Dr.
- Henny Herwina, Dr.
- Indra Junaidi Zakaria, Dr.
- Izmiarti, MS.
- Jabang Nurdin, Dr.
- Kumiadi Ilham, M.Si.
- M. Idris, M.Si.
- Mairawita, Dr.
- Mansyurdin, Prof. Dr.
- Mildawati, M.Si.
- M. Nazri Janra, M.Si., MA.
- M. Syukri Fadil, M.Si.
- Nasril Nasir, Dr.
- Nofrita, Dr.
- Nurainas, Dr.
- Numiati, Dr.
- Perladnadi, Dr.
- Putra Santoso, Dr.
- Resti Rahayu, Dr.
- Retno Prihalini, M.Si.
- Rizaldi, Dr.
- Solfiyeni, MP.
- Suwirmen, MS.
- Syaifullah, Dr.
- Syamsuardi, Prof. Dr.
- Tesri Maideliza, Dr.
- Wilson Novarino, Dr.
- Zozy Aneloi Noli, Dr.
- Zuhri Syam, MP.

### Academic Supporting Staffs

- Ellyawati, SP.
- Del Safri
- Syafyan
- Mayami, SE.
- Emawati Lutan
- Nurhaida, S.Pt.
- Zainal, SP.
- Lismaryanti, A.Md.
- Irmizon
- Roni Kurniawan
- Doddy Putra, A.Md.
- Anugrah Viona Agesi, M.Si.





## Laboratories and Supporting Facilities

### Laboratories

- Plant Taxonomy
- Animal Taxonomy
- Plant Ecology
- Animal Ecology
- Genetics and Cell Biology
- Microbiology
- Teaching Laboratory
- Plant Physiology
- Animal Physiology
- Plant Structures and Functions
- Animal Structures and Functions
- Herbarium Andalas (ANDA)
- Museum of Zoology

### Academic Supporting Facilities

- Reading room and Library
- Greenhouse and animal maintenance room
- The Biological Educational and Research Forest (HPPB)
- Arboretum Andalas

### Student Supporting Facilities

Mosque, Student Dormitory, Cafeteria, Hospital, Polyclinic, Campus Bus, Sport Facilities, Convention Center, Language Center, Guest House, etc