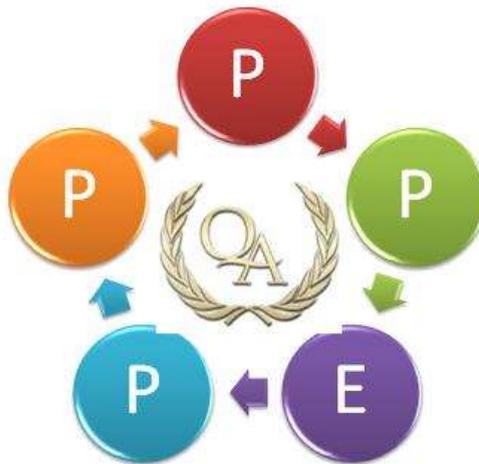




**Standard of Internal Quality Assurance System (SPMI)  
Faculty of Mathematics and Natural Sciences  
Andalas University**

**STANDARD OF LEARNING CONTENT**

**SM-02-01**



*Budaya Mutu untuk Daya Saing Regional*

**Faculty of Mathematics and Natural Sciences  
Andalas University**

**2018**

Limau Manis Campus, Padang – 25163

## PREFACE

We extend praise to God Almighty, for His permission Internal Quality Assurance Document of the Faculty of Mathematics and Natural Sciences Andalas University: Standards.

This Learning Content can be completed and published. This SPMI standard was made in order to improve the quality of higher education in FMIPA Andalas University in a planned and sustainable manner; guidelines for quality organization in the implementation of SPMI at the faculty and department / study program; and guidelines for faculty and department leaders and staff in the implementation of the specified SPMI standards. Learning Content Standards is a minimum criteria for the level of depth and breadth of learning material, which includes: the level of depth and breadth of material for each program education, which is cumulative and / or integrative from the educational level bachelor, master and doctorate and poured in study material and broken down into subjects and structured in the form of courses.

These Learning Content Standards are formulated by the Formulating Team involved Member of Quality Control Cluster (GKM) Study Program and Quality Assurance Agency Internal FMIPA Unand and is expected to be used as a reference in planning, organizing, monitoring and evaluating activities academics for academic community institutions in improving quality sustainable especially in the Faculty of Mathematics and Natural Sciences Andalas University.

Padang, June 20th, 2018

Head of BAPEM



Dr. Harmadi  
NIP. 197112221999031001

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# STANDARD OF LEARNING CONTENTS

## 1. Definition

- 1) The standard of learning content is a minimum level criterion depth and breadth of learning material.
- 2) Learning material is a set of substances learning that is arranged systematically, displays a complete figure of learning achievements to be mastered students in the learning process.

## 2. Rational Standards of Learning Content

The direction of developing UNIP FMIPA education is to produce nationally competitive and highly competitive graduates recognition at the ASEAN level. Educational development direction FMIPA was derived from the direction of the development of UNAND education, which is to produce graduates who have global competitiveness, the spirit of entrepreneurship and the character of Andalusian. Implementation FMIPA UNAND education must be implemented in accordance with the Regulations Minister of Research, Technology, and Higher Education Number 44 the year 2015 Concerning National Higher Education Standards (SN-Dikti).

In an effort to fulfill SN-Dikti and adopt a framework quality assurance of higher education in ASEAN (framework for quality assurance in higher education within ASEAN), then FMIPA UNAND has learning content standards designed to meet stakeholders. The standard content of learning at each level bachelor, master, and doctoral education is developed from standards minimum set by the association / consortium similar study programs, dynamically follow the development of scientific knowledge and technology, and the demands of graduate users. Fulfillment of learning content standards will contribute directly to compliance with CPL standards in the curriculum designed by a study program.

## 3. Statement of Content of Learning Content Standards

- 1) The head of the department is maintaining the limits of depth and breadth learning materials between courses in the program curriculum cumulatively and / or integrally bachelor, master, and doctoral degrees.
- 2) The Chair of the Study Program establishes depth and breadth course learning materials based on the chairman's proposal area of expertise with reference to the CPL description undergraduate / Master / Doctoral Study Program.
- 3) The chair of the group of expertise sets the level of depth and the breadth of learning material a subject is based on material agreed by the program association / consortium similar studies, the development of which follows the progress of scientific knowledge and input from graduates.
- 4) The final task supervisor team / commission maintains the level of depth and the breadth of learning in intermediate final research bachelor, master, and doctoral programs with reference to CPTA description specified in a study program.

#### **4. Strategies for Implementing Learning Content Standards**

- 1) BAPEM designs the standard contents of the learning content to be applied to all study programs.
- 2) The contents of the learning content standard are determined by BAPEM after got an agreement by the Dean, Deputy Dean I, Head of the Department, and Chair of the Study Program.
- 3) BAPEM is accompanied by the Head of the Department and the Head of the Study Program, socializing the standard contents of learning content to the group areas of expertise.
- 4) Head of Department, Head of Study Program, and lecturer in field groups the ability to carry out the contents of the standard of learning.
- 5) BAPEM evaluates the implementation of learning content standards by the head of the study program and the expertise group through internal auditing quality (AMI).
- 6) BAPEM controls non-achievement or deviation implementation of standards for learning content through demand corrective action (PTK) to the dean and head of the department.
- 7) BAPEM increases the standard content of learning content after all contents of standards are met in one or several quality cycles.

#### **5. Indicator of Achievement of Learning Standard Content**

- 1) Percentage of study programs that have met the content standards learning.
- 2) Percentage of groups of experts that have been fulfilled learning content standards in a study program.

#### **6. Responsible Parties Achieve Learning Content Standards**

The party responsible for achieving learning content standards that is:

- 1) Dean;
- 2) Deputy Dean I;
- 3) Head of Department;
- 4) Chair of the Study Program;
- 5) Chair of the expertise group; and
- 6) Lecturer.

#### **7. References**

- 1) Panduan Penyusunan Kurikulum Pendidikan Tinggi. Kementerian Riset, Teknologi dan Pendidikan Tinggi. Direktorat Pembelajaran dan Kemahasiswaan. Direktorat Pembelajaran. Jakarta. 2016.
- 2) Guide to AUN-QA Assessment at Programme Level. Version 3.0. ASEAN University Network (AUN), Chulalongkorn University, Bangkok, Thailand, 2015.



**KEPUTUSAN DEKAN  
FAKULTAS MIPA UNIVERSITAS ANDALAS  
Nomor : 132/XIII/D/FMIPA/2018**

Tentang

**PENUNJUKAN/PENGANGKATAN PANITIA  
DAN TIM PENYUSUN DOKUMEN STANDAR ISI PEMBELAJARAN  
SISTEM PENJAMINAN MUTU INTERNAL (SPMI)  
FAKULTAS MIPA UNIVERSITAS ANDALAS TAHUN 2018**

**DEKAN FAKULTAS MIPA UNIVERSITAS ANDALAS**

- Menimbang :**
- a. Bahwa dalam rangka peningkatan mutu pendidikan tinggi secara berencana dan berkelanjutan di Fakultas MIPA Universitas Andalas, maka perlu dirumuskan dan disusunnya Dokumen Standar Isi Pembelajaran Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018;
  - b. Bahwa untuk kelancaran pelaksanaan kegiatan pada butir "a" di atas, dirasa perlu menunjuk dan mengangkat Panitia dan Tim Penyusun Dokumen Standar Isi Pembelajaran Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018.
- Mengingat :**
1. Undang-Undang Nomor 8 Tahun 1974 dan Nomor 43 Tahun 1999 tentang pokok-pokok Kepegawaian;
  2. Undang-undang Nomor 20 tahun 2003 tentang Sistem Pendidikan Nasional;
  3. Undang-Undang Nomor 5 Tahun 2015 tentang Aparatur Sipil Negara (ASN);
  4. Peraturan Pemerintah RI Nomor 17 tahun 2010 tentang Pengelolaan dan Penyelenggaraan Pendidikan sebagaimana telah diubah dengan PP Nomor 66 Tahun 2010;
  5. Keputusan Menteri Pendidikan dan Kebudayaan Nomor 25 Tahun 2012 tentang Organisasi dan Tata Kerja Universitas Andalas;
  6. Keputusan Menteri Keuangan Nomor 501/KMK.05/2009 tentang Penetapan Universitas Andalas sebagai instansi pemerintah yang menerapkan Pengelolaan Keuangan Badan Layanan Umum;
  7. Keputusan Rektor Universitas Andalas Nomor 809/III/A/Unand-2016 tanggal 9 Agustus 2016 tentang Pengangkatan Dekan Fakultas MIPA Universitas Andalas Periode 2016 – 2020;
  8. Pengesahan DIPA Universitas Andalas Tahun 2018 Nomor SP. DIPA-2.01.2.400928/2018 tanggal 5 Desember 2017.

**MEMUTUSKAN**

- Menetapkan :**
- Pertama :** Menunjuk/mengangkat nama yang tersebut pada lampiran keputusan ini sebagai Panitia dan Tim Penyusun Dokumen Standar Isi Pembelajaran Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018.
- Kedua :** Panitia dan Tim Penyusun Dokumen Standar Isi Pembelajaran Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018 dalam menjalankan tugasnya bertanggung jawab kepada Dekan FMIPA Unand.
- Ketiga :** Segala biaya yang timbul akibat diterbitkannya keputusan ini dibebankan kepada anggaran DIPA Universitas Andalas Tahun 2018.
- Keempat :** Keputusan ini berlaku sejak tanggal ditetapkan, dengan ketentuan apabila dikemudian hari terdapat kekeliruan dalam penetapan ini akan diadakan perbaikan sebagaimana mestinya.

Ditetapkan di : Padang

Pada Tanggal : 27 Februari 2018



**Tembusan :**  
1. Yang bersangkutan  
2. Arsip

Lampiran I : Keputusan Dekan Fakultas MIPA Universitas Andalas

Nomor : 132 /XIII/D/FMIPA/2018  
Tanggal : 27 Februari 2018  
Tentang : Tim Penyusun Dokumen Standar Isi Pembelajaran Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018

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3.	Nova Noliza Bakar, M.Si.	Tim Penyusun
4.	Dr. Suryati	Tim Penyusun
5.	Dr. Dewi Imelda Roesma	Tim Penyusun
6.	Hazmira Yozza, M.Si.	Tim Penyusun
7.	Dr. Diana Vanda Wellia	Tim Penyusun
8.	Dr. Upita Septiani	Tim Penyusun
9.	Dr. Rahmayeni	Tim Penyusun
10.	Dr. Djong Hon Tjong	Tim Penyusun

  
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Nomor : 132 /XIII/D/FMIPA/2018

Tanggal : 27 Februari 2018

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4.	Dr. Tesri Maideliza	Sekretaris
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6.	Dra. Zufahmi	Anggota
7.	Sosmiadi, M.Kom.	Anggota
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