

# Ministry of Research, Technology and Higher Education of the Republic of Indonesia

## YOGYAKARTA STATE UNIVERSITY

### **FACULTY OF MATHEMATICS AND NATURAL SCIENCES**

### **SYLLABUS**

Study Program : Chemistry Education

Course Name : CHEMISTRY CURRICULUM IN HIGH SCHOOL

Semester Credit System : 2 Semester : 3 Prerequisites : -

Lecturer : Dr. Das Salirawati, M. Si.

**Description**: Through this course students are expected to be able to understand curriculum development, contruct some examples of curriculum

component models and prepare the syllabus, understand the prevailing secondary school curriculum..

# **Learning Outcomes (Basic Competence):**

- 1. Students are able to master the ways of curriculum development in the implementation of education, in terms of objectives (competence), content (content), process (method), and evaluation.
- 2. Students are able to study curriculum development in Indonesia and curriculum applicable in Indonesia today, especially chemistry curriculum.
- 3. Students are able to analyze the chemistry curriculum in junior and senior high schools, as well as the chemistry curriculum of the countries of the world.
- 4. Students are able to design the curriculum at the level of learning in the form of Lesson Plan.

Meet ings	Sub-Competence	Learning Materials	Learning Models	Learning Activities	Assessment Indicator	Assessment Technique	Scorin g weigh (per sub- comp)	Time	Referen ce
1	2	3	4	5	6	7	8	9	10
1-2	Demonstrate curriculum views, curriculum development foundations, curriculum components, and curriculum levels	CHAPTER I Various Views on the Curriculum  1. Basic Concepts of Curriculum.  2. Basis of Curriculum Development .  3. Curriculum Components.  4. Level of Curriculum.	Lecturin g and discussi on	Students are able to:  Describes curriculum views, curriculum development foundations, curriculum components, and curriculum levels through question and answer and self-study.	Students are able to: Explain various views on curriculum, curriculum development foundation, curriculum component, & curriculum level	Quiz	4%	2x100'	2, 8, 18
3-4	Analyze teacher role in curriculum development and system analysis in its implementation	Chapter II Master's Role in Curriculum Development 1. Teacher Profession	Lecturin g	Studying the profession & teacher competence, as well as its role in curriculum development.	Describe the profession & teacher competence as well as its role in curriculum development.	Quiz	4%	1x100'	2, 8, 15 -17
	3. T	2. Teacher Competence 3. Teacher's Role in Curriculum	Discussi on	Discuss in groups to solve problems/ cases related to system analysis.	Solve problems / cases related to system analysis.	Product (discussion results)	5%	1x100′	

Meet ings	Sub-Competence	Learning Materials	Learning Models	Learning Activities	Assessment Indicator	Assessment Technique	Scorin g weigh (per sub- comp)	Time	Referen ce
		Development 4. System Analysis							
5	Reviewing curriculum development in Indonesia	CHAPTER III Curriculum Development in Indonesia	Lecturin g and discussi on	Learn the development of curriculum applicable in Indonesia through active activity in question and answer.	Describe the development of curriculum applicable in Indonesia.	Quiz	4%	1x100′	2, 18
6-7	Assessing the starting point of the Curriculum 2013 (K-13) with various things behind it.	CHAPTER IV Curriculum 2013 1. The Early Idea of Curriculum Change 2. Internal & External Challenges 3. Rational Birth of K-13 4. Element of KTSP Change to K-13	Lecturin g and discussi on	Criticizing the background of K-13 and KTSP change elements into K-13 through active participation in question and answer.	Explains the background of the birth of K-13 and its element of change.	Quiz	4%	2x100'	2 – 4, 7, 8, 11- 14
8	Analyze the relevance of core competencies and basic competencies with	5. Regulation of the Ministry of Education and Culture	Tasks	Analyze the relevance of core competencies and basic competencies with indicators of achievement of	Shows the relevance of core competencies and basic competencies	Product (analysis results of core	5%	1x100′	8, 9, 10

Meet ings	Sub-Competence	Learning Materials	Learning Models	Learning Activities	Assessment Indicator	Assessment Technique	Scorin g weigh (per sub- comp)	Time	Referen ce
	indicators of achievement of competence	Permedikbud No 59, 103, 104 Year 2014		competencies based on Regulation of the Ministry of Education and Culture.	with indicators of achievement of competencies based on Regulation of the Ministry of Education and Culture.	competencie s, basic competencie s, and indicators of achievement of competencie s)			
9-10	Analyze the application of a scientific approach in K-13.	CHAPTER V Scientific approach.  1. Understandin g and Philosophy The scientific approach.  2. Steps of the Scientific Approach.	Lecturin g, tasks	<ol> <li>Learn about the scientific approach and its application in the field and its problems.</li> <li>Identify the advantages and disadvantages of learning video display with the scientific approach component.</li> </ol>	Mastering the scientific approach and its application through identifying the suitability of a learning video display with a scientific approach component	Product (video evaluation results)	5%	2x100′	5, 8, 10 -13
11- 12	Review the various instructional models suggested by K-13.	CHAPTER VI Learning Models in K- 13	Lecturin g and tasks	Master the different learning models suggested by K-13.	Demonstrate the different learning models suggested by K-13	Quiz	4%	1x100'	5, 9, 11 -14

Meet ings	Sub-Competence	Learning Materials	Learning Models	Learning Activities	Assessment Indicator	Assessment Technique	Scorin g weigh (per sub- comp)	Time	Referen ce
		<ol> <li>Problem         <ul> <li>Based</li> <li>Learning</li> <li>(PBL)</li> </ul> </li> <li>Project</li> <li>Based</li> </ol>		Designing an example of a chemistry learning model using the learning models recommended by K-13.	Shows the design of the chemistry learning model as recommended by the learning model by K-13.	Product (designing results)	5%		
		Learning (PjBL) 3. Discovery Learning (DL)	Present ation	Presenting the results of the design of the chemistry learning model as recommended by the learning model in K-13.	Presenting the results of the design of the chemistry learning model as recommended by the learning model in K-13.	Presentation skill	10%	1x100'	

13- 15	Assessing the chemistry curriculum in junior high schools in Integrated Science and chemistry of high school and chemistry curriculum of the countries of the world	CHAPTER VII Studies of Various Chemistry Curriculum 1. Chemistry Curriculum in Junior High School in Integrated Science 2. High School Chemistry Curriculum	Lecturing , tasks	2.	Criticizing the chemistry curriculum of junior high school in Integrated Science and high school chemistry in terms of four components (objectives, content, processes (methods), & evaluation), and chemistry curriculum from countries in the world.  Examine the chemistry curriculum of a country in group	Assessing the chemistry curriculum of a country in terms of 4 components.	Product (study results)	5%	1x100'	1, 2, 6 -
		3. Chemistry Curriculum from Countries of the World	Presenta tion	che	senting the results of a mistry curriculum study n a country in groups	Presenting the results of a chemistry curriculum study from a country in groups	Presentation skill	10%	2x100'	

16	Design a complete curriculum at the level of learning in the form of Lesson Plan	CHAPTER VIII Lesson Plan Based on K-13 1. Definition of Lesson Plan 2. Components of Lesson Plan 2. Format of Lesson Plan	Lecturing and tasks.	Mastering the way of preparing Lesoon Plan based on K-13 shown in the form of RPP design of one of the chemistry sub-topics in junior or senior high school.	Prepare RPP based on K-13 by taking one of the chemistry subtopics in junior or senior high school.	Product (Lesson Plan)	10%	1x100'	5, 9 - 16
17	FINAL TEST					Written test	30%	1 x 90'	

# Scoring:

No	Scoring Components	Weight (%)
1.	Quiz (Q)	20%
2.	Task (T)	30%
3.	Presentation Skills (P)	20%
4.	Final Test (F)	30%
Tota	l	100%

# **Final Score:**

$$NA = (20\%Q) + (30\%T) + (20\%P) + (30\%F)$$

### Reference:

1. Bloom, B.S. et. al. (1956). Taxonomy of Education Objectives: The Classification of Educational goal (Hand book 1: The Cognitive Domain). New York: Longman Inc. 2. Das Salirawati. (2001). Diktat Kuliah: Kajian Kurikulum Kimia SMU. Yogyakarta: FMIPA – UNY. 3. Kemdikbud. (2013). Permendikbud Nomor 54 tahun 2013: tentang Standar Kompetensi Lulusan Pendidikan Dasar dan Menengah. Jakarta: Kemdikbud RI. (2013). Permendikbud Nomor 64 tahun 2013: tentang Standar Isi Pendidikan Dasar dan Menengah. Jakarta: Kemdikbud RI. 5. (2013). Permendikbud Nomor 65 tahun 2013: tentang Standar Proses. Jakarta: Kemendikbud RI. (2013). Permendikbud Nomor 68 tahun 2013: tentang Kerangka Dasar dan Struktur Kurikulum SMP/MTs. Jakarta: Kemdikbud RI. (2013). Permendikbud Nomor 69 tahun 2013: tentang Kerangka Dasar dan Struktur Kurikulum SMA/MA. Jakarta: Kemdikbud RI. 8. (2014). Permendikbud Nomor 59 tahun 2014: tentang Kurikulum 2013 SMA/MA. Jakarta: Kemdikbud RI. 9. (2014). Permendikbud No. 103/2014 tentang: Pembelajaran pada Pendidikan Dasar dan Pendidikan Menengah. Jakarta: Kemdikbud RI. . (2014). Permendikbud No. 104/2014 tentang: Penilaian Hasil Belajar oleh Pendidik pada Pendidikan Dasar dan Pendidikan Menengah. Jakarta: Kemdikbud RI. 11. . (2014). Panduan Pelatihan Implementasi Kurikulum 2013 Tahun 2014 Jenjang SMA/SMK (untuk Narasumber Nasional). Jakarta: Kemdikbud RI. 12. . (2015). Panduan Pelatihan Implementasi Kurikulum 2013 Tahun 2015 Jenjang SMA/SMK (untuk Narasumber Nasional). Jakarta: Kemdikbud RI. 13. . . (2014). Materi Pelatihan Guru Implementasi Kurikulum 2013 Tahun 2014 SMA/SMK Mata Pelajaran Kimia. Jakarta: Kemdikbud RI.

14	(2015). Materi Pelatihan Guru Implementasi Kurikulum 2013 Tahun 2015 SMA/SMK Mata Pelajo	<i>aran Kimia</i> . Jakarta: Kemdikbud R
15. Kemdikna	as. (2003). <i>UU RI No. 20/2003 tentang: Sistem Pendidikan Nasional</i> . Jakarta: Depdiknas RI.	
16	(2005). PP RI No. 19/2005 tentang: Standar Nasional Pendidikan. Jakarta: Depdiknas RI.	
17	(2005). UU RI No. 14/2005 tentang: Guru dan Dosen. Jakarta: Depdiknas RI.	
18. Liliasari, e	et al. (1998). <i>Kurikulum dan materi kimia SMU</i> . Jakarta: UT	
Hea	d of Department of Chemistry Education.	Yogyakarta, December 2017 Lecturer,
E	<u>Jaslin Ikhsan Ph. D.</u> IN. 19680629 199303 1 001	<u>Dr. Das Salirawati, M.Si</u> EIN. 19651016 199203 2 001