



UNIVERSITAS NEGERI YOGYAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
DEPARTMENT OF CHEMISTRY EDUCATION
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Bachelor of Education in Chemistry

MODULE HANDBOOK

Module name:	Chemistry Learning Media
Module level, if applicable:	Undergraduate
Code:	MPK6202
Sub-heading, if applicable:	-
Classes, if applicable:	2
Semester:	3 rd
Module coordinator:	Dr. Das Salirawati
Lecturer(s):	Marfuatun, S.Pd.Si.,M.Si.; Anggiyani Ratnaningtyas Eka Nugraheni, S.Pd.Si.,M.Pd.; Dina, S.Pd.,M.Pd.
Language:	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course
Teaching format / class hours per week during the semester:	100 minutes lectures, 120 minutes individual study, and 120 minutes structured activities per week.
Workload:	Total workload is 90.67 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks.
Credit points:	2 SKS (3.28 ETCS)
Prerequisites course(s):	-
Course outcomes:	After taking this course, the students are expected to be able to: CO1. Plan and create the innovative learning media for chemistry learning CO2. Mention various types of learning media and their functions then plan chemical learning media that are in accordance with the material in the chemical syllabus in schools, students are also expected to be able to describe the production techniques of various chemical learning media CO3. Design and apply produced learning media to explain the chemical concepts that exist in schools
Content:	In this course we will discuss the meaning of learning media, the role and function of learning media, types of learning media, planning and selection of learning media, production techniques for learning media, learning media presentation techniques, and evaluation of learning media, which are specific to learning chemistry. It is expected that after completing this lecture students will be equipped with the use of learning media, especially the teaching and learning process in schools so that they can enhance the quality of the teaching and learning process which ultimately can improve the quality of learning outcomes
Study / exam achievements:	Attitude assessment is carried out at each meeting by observation and/or self-assessment techniques using the assumption that basically every student has a good attitude. The student is marked very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not taken into account in the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude. The final mark will be weight as follow:

No	CO	Assessment Object	Assessment Technique	Weight
1	CO1, CO2, CO3.	Assignments	Presentation	25%
		Mid-term Exam	Written Test	15%
		Final Exam	Project	45%
		Participations		15%
Total				100%
Forms of media:	Board, LCD Projector, Laptop/Computer			
References:	<p>Arief S. Sadiman, dkk. (1993). <i>Media Pendidikan. Pengertian, Pengembangan dan Pemanfaatannya</i>. Jakarta: Pustekkom dan PT Raja Grafindo Persada</p> <p>Asnawir dan Usman, B. <i>Media Pembelajaran</i>, (Jakarta: Ciputat Pers, 2002)</p> <p>Azhar Arsyad. (2006). <i>Media Pengajaran</i>. Jakarta : Grafindo</p> <p>Baylen et al., Adriana (Eds.). (2015). <i>Essentials of Teaching and Integrating Visual and Media Literacy: Visualizing Learning</i>. Switzerland: Springer Nature.</p> <p>Djamarah, S., B. (1994). <i>Prestasi Belajar dan Kompetensi Guru</i>. Surabaya: Usaha Nasional.</p> <p>Gerlach, Vernon S.; Ely, Donald P., and Rob Melnick. (1980). <i>Teaching and Media. A Systematic Approach</i>. New Jersey: Prentice-Hall, Inc</p> <p>Heinich, Robert et.a. (1993). <i>Instructional Media and the New Technologies of Instruction</i>. New York : Macmillan</p> <p>Klosterman, M. L., Sadler, T. D., & Brown, J. (2012). Science teachers' use of mass media to address socio-scientific and sustainability issues. <i>Research in Science Education</i>, 42, 51-74.</p> <p>Nana Sudjana dan Ahmad Riva'i. (1990). <i>Media Pengajaran</i> Bandung: CV. Sinar Baru.</p> <p>Ngalim Purwanto. (2000). <i>Psikologi Pendidikan</i>. Bandung: Remaja Rosda Karya.</p> <p>Priyambodo, E. (2014) <i>Media Pembelajaran Kimia : Pengembangan dan Pemanfaatannya</i>. Diklat Kuliah.</p> <p>Priyambodo, E., Sulistyani. (2014). The Effect of Multimedia Based Learning (MBL) in Chemistry Teaching Learning on Students' Self-Regulated Learning (SRL). <i>Journal of Education and Learning</i>. Vol.8 (4) pp. 363-367.</p> <p>Priyambodo, E., Nugraheni, A. R. E., Wiyarsi, A., Dina, & Lathifa Husna, D. (2019). Developing an android-based application (AVALIMA) for chemical literacy evaluation. <i>Journal of Physics: Conference Series</i>, 1397(1). https://doi.org/10.1088/1742-6596/1397/1/012041</p> <p>Putra, P. S., Asi, N. B., Anggraeni, M. E., & Karelius. (2020). Development of android-based chemistry learning media for experimenting. <i>Journal of Physics: Conference Series</i>, 1422(1). https://doi.org/10.1088/1742-6596/1422/1/012037</p> <p>Rahardjo, R. (1996). <i>Media Pembelajaran</i>. Bandung: Remaja Rosdakarya.</p> <p>Rohani, A. (1997). <i>Media Instruksional Edukatif</i>. Jakarta: Rineka Cipta.</p> <p>Sudjarwo. (1989). <i>Beberapa Aspek Pengembangan Sumber Belajar</i>. Jakarta: PT. Mediatama.</p> <p>Syaful Bahri Djamarah dan Aswan Zain. (2002). <i>Strategi Belajar Mengajar</i>. Jakarta: Rineka Cipta.</p> <p>Turkoguz, S. (2012). Learn to teach chemistry using visual media tools. <i>Chem. Educ. Res. Pract.</i> 13(4). 401-409". http://dx.doi.org/10.1039/C2RP20046E</p>			

PLO and CO mapping

	PLO					
	Attitude		Knowledge	Specific Skill	General Skill	
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
CO1					√	
CO2			√			
CO3				√		