



MODULE HAND BOOK
MECHANICAL ENGINEERING VOCATIONAL EDUCATION STUDY PROGRAM
FACULTY OF ENGINEERING – UNIVERSITAS NEGERI PADANG

COURSE NAME	CODE	Course classification	CU		Sem	Version
			Theory	Pract		
Social and cultural science	UNP2.60.1402	Character Building and General education	2		1	1
			TTD Responsible Lecturer			
INFORMATION	Dean of the Faculty of Engineering	Head of Mechanical Engineering Department	Responsible of MEVE			
	<u>Dr. Fahmi Rizal, M.Pd., MT</u> NIP. 195912041985031004	<u>Drs. Purwantono, M.Pd</u> NIP. 196308041986031002	<u>Drs. Purwantono, M.Pd</u> NIP. 196308041986031002			
Program Learning Outcomes	Program Learning Outcomes (PLO):					
	1. Possess a good ability to apply the basic science (mathematics and natural sciences) and other disciplines in profesional jobs / projects (Knowledge-understanding) <ul style="list-style-type: none"> 1.1. possess a good understanding and can apply the basic concept of mathematics to solve various technical problems 1.2. possess a good understanding and can apply basic the concept of physic to solve various technical problems 1.3. possess a good understanding and can apply basic the concept of chemistry to solve various technical problems 2. Possess a critical and creative thingking in identifying, formulating, problem solving and evaluating various problems in mechanical engineering using the most appropriate and effective scientific method (Engineering analysis, investigations and assessment):					

- 2.1. problem identification skills
- 2.2. problem analysis skills
- 2.3. problem evaluation skills
- 3. Possess a good ability in designing, manufacturing and operating machines (**Engineering design**)
 - 3.1. able to formulate ideas/concepts into a technical drawing, design and budget plans
 - 3.2. able to operate various machines and other engineering equipment with the correct standard operating procedure
 - 3.3. able to design a machine or machinery system based on a valid scientific theory
 - 3.4. able to realize a concept/design into a prototype, manufacturing process and engineering system
- 4. Possess a good ability to design, organize and evaluate the education and learning process in *mechanical engineering vocational education*. (**Education design**)
 - 4.1. able to design curriculum and learning process by considering various aspects
 - 4.2. able to organize, control, evaluate and improve the quality of the learning process
 - 4.3. able to develop an interesting, effective and efficient learning medias
- 5. Possess a good ability to adapt to development in science and technology and apply it into professional jobs by considering any non-technical aspects. (**Engineering practice**)
 - 5.1. able to innovate and develop technology in the field of mechanical engineering by considering social, economic and environmental aspects
 - 5.2. able to carry out the optimization process and increase the efficiency of machines or machining system.
 - 5.3. able to improve the performance of machine/ machinery system by applying the information technology
- 6. Possess a good softskil and spirit of lifelong learning (**Transferable skill / softskill**)
 - 6.1. possess a religious character
 - 6.2. possess a spirit of nasionalisme, social sensitivity and environmental consevation orientation
 - 6.3. possess the ability to communicate effectively and work together in teamwork
 - 6.4. possess the ability to transfer science and technology to society to improve the quality of life
 - 6.5. possess a good characters of entrepreneur

Course Learning

Course Learning Outcomes (CLO)

Outcomes	CLO	PLO
	1. Student able to describe the nature and scope of social and cultural science and part of General Education.	6.2; 6.3
	2. Student able to describe and analyze socio-cultural phenomena related to humans as individuals and social	6.2; 6.3
	3. Student able to explain and analyze the problems of society and culture, as well as problem solving ideas	6.2; 6.3
	4. Student able to explain socio-cultural phenomena related to socio-cultural changes	6.2; 6.3
	5. Student able to describe socio-cultural phenomena related to diversity and equality issues	6.2; 6.3
	6. Student able to explain and analyze socio-cultural phenomena related to humans, values, morals and laws	6.2; 6.3
	7. Student able to describe and analyze socio-cultural phenomena related to humans, science, technology and art	6.2; 6.3
	8. Student able to explain and analyze socio-cultural phenomena related to humans and the environment	6.2; 6.3
Course descriptions	This course aims to study social and cultural science especially in Indonesia, the development of science, technology and arts, cultural and environmental problems in the local, national, and global context.	
References	Main references (RU):	
	<ol style="list-style-type: none"> 1. Elly, M. Setiadi, et al. 2006. Basic Social and Cultural Sciences. Jakarta: Kencana Prenada Media. 2. Herimanto, W. 2011. Basic Social and Cultural Studies. Jakarta: Earth Literacy. 3. Huntington, P.S. The Clash of Civilizations and the Front Masses. Yogyakarta: Qalam. 4. Koentjaraningrat. 2000. Culture, Mentality and Development. Jakarta: Gramedia Pustaka Utama. 5. Nasikun. 2012. Indonesian Social System. Jakarta: Raja Crafindo Persada. 6. Koentjaraningrat. 2016. Introduction to Ilmu Anthropology. Jakarta: Rineka Cipta. 7. Soekanto, Soejono. 2009. An Introduction to Sociology. Jakarta: Rajawali Press. 8. Dirdjosisworo, Soedjono. 2010. Introduction to Law Science. Jakarta: Raja Grafindo Perdas 	

	Additional references (RP)	
	<ol style="list-style-type: none"> 1. Department of Anthropology, Faculty of Social and Political Sciences, University of Indonesia. Indonesian Journal of Anthropology. ISSN.1693-167X (Open Access in: http://journal.ui.ac.id) 2. Department of Sociology, Faculty of Social and Political Sciences, University of Indonesia. Society: Journal of Sociology. e-ISSN 2460-8165a p- ISSN 0852-8489 (open Access In: http://Journal.ui.ac.id/indexs) 3. Indonesian Center for Environmental Studies. UGM. Jurnal Ivlanusia don the Environment. E-ISSN: 2460-5727; p-ISSN 0854-5510 (Open Access in: http://jpe-ces-ugm.ac.id/ojs/index.php/jstnl/index/). 	
Learning Media	Software:	Hardware:
	-	
Team Teaching		
Assessment	Asignment, Mid Semester Examination, Final Semester Examination	
Requirements Subject	-	

COURSE SUBJECTS

Week	Expected competencies	Topics	Method and strategy for learning	Assignment	Criterion / Assessment indicator	References
(1)	CLO 1 Students able to describe the nature and scope of social and cultural science and part of General Education.	<ul style="list-style-type: none"> - Vision, mission and objectives. - General function of General Education courses in Higher Education. - The essence and skop of course - Learning process in Higher Education. 	Material explanation [1x40 '] Question and answer [1x20 '] Discussion [1x40 ']	writing a summary and description of the topic discussion	Able to describe vision, mission and objectives of social and cultural science, general function of educational and Collective Life (MBB) courses in Higher Education,	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3

Week	Expected competencies	Topics	Method and strategy for learning	Assignment	Criterion / Assessment indicator	References
		- Social and Culture as an alternative to solve socio-cultural problems			the essence and skop of course, learning process in Higher Education, social and culture as an alternative to solve socio-cultural problems	
(2)	CLO 2 Students able to describe and analyze socio-cultural phenomena related to humans as individuals and social	- Humans as individual and social creatures; - The functions and roles of humans as individual and social beings; - Human nature as individual and social creatures	Material explanation [1x40 ' Question and answer [1x20 ' Group Discussion [1x40 '	writing a summary and description of the topic discussion	Able to describe humans as individual and social creatures, the functions and roles of humans as individual and social beings, human nature as individual and social creatures.	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3
(3)	CLO 2 Students able to describe and analyze socio-cultural phenomena related to humans as individuals and social	- Individual rights and obligations public - Social interaction gives rise to various forms of interaction	Material explanation [1x40 ' Question and answer [1x20 ' Group Discussion [1x40 '	writing a summary and description of the topic discussion	Able to describe impact of individual rights and obligations public social interaction on various forms of interaction	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3

Week	Expected competencies	Topics	Method and strategy for learning	Assignment	Criterion / Assessment indicator	References
(4)	CLO 2 Students able to describe and analyze socio-cultural phenomena related to humans as individuals and social	<ul style="list-style-type: none"> - Impact of social interactions on various stereotypical styles - Impact of prejudice on discrimination and conflict. - Several cases of stereotypes, prejudice and discrimination as well as conflicts; - Solutions to stereotypes, prejudice, discrimination and conflict; - The dilemma between individual and social interests. 	<p>Material explanation [1x40 '] Question and answer [1x20 '] Group Discussion [1x40 ']</p>	writing a summary and description of the topic discussion	Able to describe impact of social interactions on various stereotypical styles, impact of prejudice on discrimination and conflict, the dilemma between individual and social interests. Able to analysis several cases of stereotypes, prejudice and discrimination as well as conflicts, solutions to stereotypes, prejudice, discrimination and conflict.	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3
(5)	CLO 3 Students able to explain and analyze the problems of society and culture, as well as problem solving ideas	<ul style="list-style-type: none"> - Definition of culture; form and cultural characteristics - Function of the human mind - Humans as creators and users of culture. - Culture as guideline for 	<p>Material explanation [1x40 '] Question and answer [1x20 '] Group Discussion [1x40 ']</p>	writing a summary and description of the topic discussion	Able to describe definition of culture; form and cultural characteristics, function of the human mind, humans as creators	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3

Week	Expected competencies	Topics	Method and strategy for learning	Assignment	Criterion / Assessment indicator	References
		human life			and users of culture. Able to describe culture as guideline for human life	
(6)	CLO 3 Students able to explain and analyze the problems of society and culture, as well as problem solving ideas	<ul style="list-style-type: none"> - Community and cultural dynamics; - Community problems and culture in people's lives. 	Material explanation [1x40 ' Question and answer [1x20 ' Group Discussion [1x40 '	writing a summary and description of the topic discussion	Able to describe community and cultural dynamics. Able to analyze community problems and culture in people's lives.	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3
(7)	CLO 4 Students able to explain socio-cultural phenomena related to socio-cultural changes	<ul style="list-style-type: none"> - Definition of manners, civilization and socio-cultural changes; - Humans as civilized creatures and civilized society. - Theories regarding socio-cultural change; - Tradition, modernization and civil society 	Material explanation [1x40 ' Question and answer [1x20 ' Group Discussion [1x40 '	writing a summary and description of the topic discussion	Able to explain definition of manners, civilization and socio-cultural changes, humans as civilized creatures and civilized society. Able to explain theories regarding socio-cultural change, tradition, modernization and civil society	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3
(8)	Mid Semester Examination					

Week	Expected competencies	Topics	Method and strategy for learning	Assignment	Criterion / Assessment indicator	References
(9)	CLO 5 Students able to explain socio-cultural phenomena related to diversity and equality issues	<ul style="list-style-type: none"> - The meaning of diversity and equality; - The diverse and dynamic structure of Indonesian society is characterized by the diversity of ethnicities and religions; - The influence of diversity on various patterns of human life; - Every society has culture as a way of life together (community and state); - The concept of Bhineka Tunggal Ika in the life of the Indonesian nation 	<p>Material explanation [1x40 '] Question and answer [1x20 '] Group Discussion [1x40 ']</p>	writing a summary and description of the topic discussion	<p>Able to explain meaning of diversity and equality, diverse and dynamic structure of Indonesian society that characterized by the diversity of ethnicities and religions. Able to describe influence of diversity on various patterns of human life and concept of Bhineka Tunggal Ika in the life of the Indonesian nation</p>	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3
(10)	CLO 5 Students able to describe socio-cultural phenomena related to diversity and equality issues	<ul style="list-style-type: none"> - Plurality in social dynamics culture; - The diversity and equality of the Indonesian people as the nation's wealth; - The problems of diversity and their solutions in the life of society and the country. - Indonesian Multicultural Society 	<p>Material explanation [1x40 '] Question and answer [1x20 '] Group Discussion [1x40 ']</p>	writing a summary and description of the topic discussion	<p>Able to describe plurality in social dynamics culture, diversity and equality of the Indonesian people as the nation's wealth. Able to analyze problems of diversity and their solutions in the life</p>	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3

Week	Expected competencies	Topics	Method and strategy for learning	Assignment	Criterion / Assessment indicator	References
					of society and the country and describe Indonesian Multicultural Society.	
(11)	CLO 6 Students able to explain and analyze socio-cultural phenomena related to humans, values, morals and laws	<ul style="list-style-type: none"> - Definition of values, moral and law; - The function of values, morals and law in the life of society and the state; - The process of forming values, morals and laws; 	Material explanation [1x40 '] Question and answer [1x20 '] Group Discussion [1x40 ']	writing a summary and description of the topic discussion	Able to explain definition of values, moral and law, function of values, morals and law in the life of society and the state. Able to describe process of forming values, morals and laws.	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3
(12)	CLO 6 Students able to explain and analyze socio-cultural phenomena related to humans, values, morals and laws	<ul style="list-style-type: none"> - Embodiment of values, morals and law in the life of society and the state; - Moral and legal demands and sanctions in society and the state; - Justice, order and social welfare as a form of a society that is moral and obeys the law; - Problems with values, morals and laws in society and the state. 	Material explanation [1x40 '] Question and answer [1x20 '] Group Discussion [1x40 ']	writing a summary and description of the topic discussion	Able to explain Embodiment of values, morals and law in the life of society and the state. Able to describe moral and legal demands and sanctions in society and the state. Able to describe justice, order and social welfare as a	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3

Week	Expected competencies	Topics	Method and strategy for learning	Assignment	Criterion / Assessment indicator	References
					form of a society that is moral and obeys the law. Able to analyze problems with values, morals and laws in society and the state	
(13)	CLO 7 Students able to describe and analyze socio-cultural phenomena related to humans, science, technology and art	<ul style="list-style-type: none"> - Definition of science, technology and art; - The relationship between science, technology and art. - Humans as subjects and objects of science, technology and art - Development of Science and technology in society 	Material explanation [1x40 '] Question and answer [1x20 '] Group Discussion [1x40 ']	writing a summary and description of the topic discussion	Able to describe definition of science, technology and art, relationship between science, technology and art. Able to describe humans as subjects and objects of science, technology and art. Able to describe development of science and technology in society	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3
(14)	CLO 7 Students able to describe and analyze socio-cultural phenomena related to	<ul style="list-style-type: none"> - The impact of the misuse of science and technology on socio-cultural life; - Problems on the use of 	Material explanation [1x40 '] Question and answer [1x20 '] Group Discussion [1x40 ']	writing a summary and description of the topic discussion	Able to analyze impact of the misuse of science and technology on socio-cultural life	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2,

Week	Expected competencies	Topics	Method and strategy for learning	Assignment	Criterion / Assessment indicator	References
	humans, science, technology and art	science and technology in Indonesia			and problems on the use of science and technology in Indonesia	RP3
(15)	CLO 8 Students able to explain and analyze socio-cultural phenomena related to humans and the environment	<ul style="list-style-type: none"> - Definition of environment; - Human nature as a subject and environmental object - Human view of the environment; - The reciprocal influence between natural environmental conditions and socio-cultural conditions; - Demographic problems and population growth in Indonesia; - The quantity and quality of the population and its relation to the welfare of human life; - Problems in the development of the socio-cultural and natural environment in society Indonesia. 	<p>Material explanation [1x40 ']</p> <p>Question and answer [1x20 ']</p> <p>Group Discussion [1x40 ']</p>	writing a summary and description of the topic discussion	Able to explain definition of environment, human nature as a subject and environmental object, human view of the environment, the reciprocal influence between natural environmental conditions and socio-cultural conditions, demographic problems and population growth in Indonesia, the quantity and quality of the population and its relation to the welfare of human life. Able to analyze problems in the	RU-1, RU-2, RU-3, RU-4, RU-5, RU 6, RU-7, RU-8, RP-1, RP-2, RP3

Assessment Component

Mid semester examination	: 35 %
Final semester examination	: 35%
Assignment	: 15%
<u>Presence</u>	: 15 %
Total	: 100%

Scoring/Grading level description

	Excellent	Good	Satisfy	Fail
ability to describe	Able to describe correctly and completely	Able to describe correctly but not complete	Able to describe but less clear and incomplete	Unable to describe
ability to formulate	Able to formulate correctly and completely	Able to formulate correctly but not complete	Able to formulate but less clear and incomplete	Unable to formulate
ability to calculate	Able to calculate correctly and completely	Able to calculate correctly but not complete	Able to calculate but less clear and incomplete	Unable to calculate
ability to analyze	Able to analyze correctly and completely	Able to analyze correctly but not complete	Able to analyze but less clear and incomplete	Unable to analyze

Scoring and grading system

Score	Quality	Quality score	Designation	Score	Quality	Quality score	Designation
85 – 100	A	4.0	Outstanding	55 – 59	C	2.0	Acceptable
80 – 84	A-	3.6	Excellent	50 – 54	C-	1.6	Poor
75 – 79	B+	3.3	Very good	40 – 49	D	1.0	Poor
70 – 74	B	3.0	Good	≤ 39	E	0.0	Fail
65 – 69	B-	2.6	Good	-	T	-	Postpone
60 – 64	C+	2.3	Acceptable				

