

RENCANA PEMBELAJARAN SEMESTER (RPS)

Mata Kuliah	: Bahasa Inggris (<i>English for Scientific Writing</i>)
Kode Mata Kuliah	: TKM 8111
Beban Studi	: 2 sks
Status	: Mata Kuliah Wajib Universitas
Prasyarat	: -
Praktikum	: -
Tugas	: -
Deskripsi Singkat	: Mata kuliah ini berisi tentang tuntunan (<i>guidelines</i>) membuat tulisan ilmiah dengan standar internasional.
Tujuan Pembelajaran	: Mahasiswa mampu membangun kerangka ilmiah hasil penelitian yang dilakukan dan menuangkannya dalam tulisan agar bisa dipublikasikan dalam jurnal internasional.
Pokok Bahasan	: Dasar pengantar dalam penulisan ilmiah, Konsep dasar penentuan kerangka penulisan ilmiah, Penulisan abstrak, Metode penyampaian karya tulis ilmiah dalam bentuk oral, Konsep dasar penyampaian <i>oral presentation</i> .
Learning outcomes	: A. Kemampuan bidang kerja yang diharapkan dari peserta kuliah (lingkari yang sesuai): <ul style="list-style-type: none">• Mampu mengembangkan pengetahuan dan/atau teknologi baru di bidang spesifik yang relevan dengan sistem mekanika (<i>mechanical system</i>) melalui riset taat kaidah hingga menghasilkan karya kreatif, orisinal, dan teruji.• Mampu memecahkan permasalahan rekayasa dan teknologi di bidang spesifik yang relevan dengan sistem mekanika (<i>mechanical system</i>) melalui pendekatan inter, multi atau transdisipliner dengan memperhatikan faktor-faktor ekonomi, kesehatan dan keselamatan publik, kultural, sosial, lingkungan, dan konservasi energi.• Mampu mengonseptualisasikan, merancang, dan mengimplementasikan riset untuk menghasilkan pengetahuan, teknologi, metode, atau konsep baru dan terdepan yang bermanfaat di bidang spesifik yang relevan dengan sistem mekanika (<i>mechanical system</i>).• Mampu mengomunikasikan pemikiran serta hasil karyanya dengan kelompok pakar sebidang (<i>peer review</i>) maupun khalayak yang lebih luas. B. Penguasaan pengetahuan lulusan Program Doktor Teknik Mesin adalah: <ol style="list-style-type: none">① Menguasai filosofi ilmu sains rekayasa, ilmu perancangan rekayasa, serta metode dan teknologi terkini yang relevan dengan sistem mekanika (<i>mechanical system</i>).② Menguasai body of knowledge yang substansial dan terdepan melalui akuisisi pengetahuan dan teknologi secara sistematis pada bidang ilmu atau praktik profesi teknik mesin.

(1) Minggu Ke-	(2) MATERI PEMBELAJARAN	(3) BENTUK PEMBELAJARAN	(4) KEMAMPUAN AKHIR YANG DIHARAPKAN (KOMPETENSI)	(5) KRITERIA PENILAIAN (INDIKATOR)	(6) BOBOT NILAI (%)
1	<ul style="list-style-type: none"> Introduction on the category of scientific writing 	Lecture notes	Students are able to identify the characteristic of scientific writing	The ability to state the scientific problem	4 %
2	<ul style="list-style-type: none"> The basic guideline on scientific writing: the history of scientific writing, the function of scientific writing as a media for communication, and the use of English in scientific writing 	Lecture and discussion	Students are able to recognize the basics of scientific writing (clarity, simplicity, and economical language)	The comprehension that scientific communication has to include <i>receiving signals</i> and <i>understanding signals</i>	4%
3	<ul style="list-style-type: none"> Discussion on the concepts of <i>Title, Abstract, Introduction, Methods section, Results, Discussion, Acknowledgement, References</i> 	Lecture and discussion	Students are able to comprehend the scientific standards of the <i>Title, Abstract, Introduction, Methods section, Results, Discussion, Acknowledgement, References</i>	The ability to explain the concept of IMRAD (<i>Introduction, Methods, Results, and Discussion</i>)	5%
4	<ul style="list-style-type: none"> The making of <i>Outline Abstract</i> 	Practicing to write the outline of the abstract	Students are able to apply the concept of IMRAD in abstract as a representation of the whole result research	The ability to apply IMRAD in a mini version	6%
5	<ul style="list-style-type: none"> The elaboration of <i>Outline Abstract</i> 	Expanding the <i>Outline Abstract</i>	Students are able to explain the outline in a more complete description	The result of <i>Outline Abstract</i> explanation	6 %
6	<ul style="list-style-type: none"> The discussion on the framework of the way to communicate the scientific writing in oral expression 	Lecture and discussion	Students are able to apply the flowchart of scientific presentation	The flowchart of scientific presentation	6%
7	<ul style="list-style-type: none"> The oral presentation of <i>Abstract</i> (1) 	Student presentation according to the interest group	Students are able to use the scientific language and convert it from the writing expression to oral expression	The result of presentation and discussion of the scientific content	7%

8	<ul style="list-style-type: none"> The oral presentation of <i>Abstract</i> (2) 	Student presentation according to the interest group	Students are able to use the scientific language and convert it from the writing expression to oral expression	The result of presentation and discussion of the scientific content	7%
9	<ul style="list-style-type: none"> The oral presentation of <i>Abstract</i> (3) 	Student presentation according to the interest group	Students are able to use the scientific language and convert it from the writing expression to oral expression	The result of presentation and discussion of the scientific content	7%
10	<ul style="list-style-type: none"> <i>Wrapping up 1</i> 	Formulating the standards of scientific writing in the form of written and oral expressions	Students are able to judge their own ability in practicing their writing and oral skills which had been done during the formulation of the <i>Abstract</i>	The individual's writing and oral skills	6%
11	<ul style="list-style-type: none"> The explanation of <i>Introduction section</i> as the basic for writing the whole study in a form of scientific report (1) 	Elaboration of the importance of <i>Introduction</i> for the whole writing process of scientific report	Students are able to organize scientific writing in Stage 1 (<i>Establishing a context and Reviewing previous research</i>)	The ability to write in <i>chronological order</i>	7%
12	<ul style="list-style-type: none"> The explanation of <i>Introduction section</i> as the basic for writing the whole study in a form of scientific report (2) 	Elaboration of the importance of <i>Introduction</i> for the whole writing process of scientific report	Students are able to organize scientific writing in Stage 2 (<i>Advancing to Present Research and Method</i>)	The ability to write in <i>chronological order</i>	7%
13	<ul style="list-style-type: none"> The guideline of writing <i>Introduction</i> using the 5 Stages: <i>General Information</i> up to <i>Specific Information</i> 	Elaboration of the Stage 1: <i>The Setting</i> , and Stage 2: <i>The Aspect of the Problem Already Studied</i>	Students are able to follow the guideline of Stages 1 and 2 for writing the <i>Introduction</i>	Outline Stages 1 and 2	7%
14	<ul style="list-style-type: none"> The guideline of writing <i>Introduction</i> using the 5 Stages: <i>General Information</i> up to <i>Specific Information</i> 	The discussion of Stage 3: <i>Indicating the Need for More Investigation</i> , Stage 4: <i>Giving the Purpose of Objective of the Study</i> , and Stage 5: <i>Valuing or Justifying the</i>	Students are able to follow the guideline of Stages 3, 4, and 5 for writing the <i>Introduction</i>	Outline Stages 3, 4, and 5	7%

		<i>Study Carried Out</i>			
15	<ul style="list-style-type: none"> The elaboration of <i>Outline Introduction</i> 	Student activity: writing Stage 1 and Stage 2 in complete form	Students are able to write <i>Introduction</i> following the guidelines of Stage 1, Stage 2	Student writing ability on Introduction (Stage 1, Stage 2)	7%
16	<ul style="list-style-type: none"> The elaboration of <i>Outline Introduction</i> 	Student activity: writing Stage 3, 4, and Stage 5 in complete form	Students are able to write <i>Introduction</i> following the guidelines of Stage 3, Stage 4, and Stage 5	Student writing ability on Introduction (Stage 3, Stage 4, and Stage 5)	7%

References :

- Crawford, Allan, et al., 2005. *Teaching and Learning Strategies for the Thinking Classroom*. The International Debate Education Association, Publication of the Reading and Writing for Critical Thinking Project
- Day, Robert A., 1988. *How to Write and Publish a Scientific Paper*. The Oryx Press, 2214 North Central at Encanto Phoenix
- ..., 2012. *Scientific Writing*. IELI, Flinders University, Adelaide -- Australia
- Herminingrum, Sri, 2015. *Writing Up Research – A Guideline*. Doctorate Program, Department of Mechanical Engineering, Faculty of Engineering, Universitas Brawijaya Malang
- Lindsay, David, 1993. *A Guide to Scientific Writing*. Longman Cheshire Pty. Limited, Melbourne 3205 Australia
- McLuhan, M., 1962. *Writing Report*. The Gutenberg Galaxy, Routledge & Kegan Paul
- Richard, Jack C., and David Bohlke, 2011. *Creating Effective Language Lessons*, 1st edition, Cambridge University Press