Rubric: MSc Literature Review for MSc Engineering students

The Learning Objectives

The student is able to:

- Search, select, evaluate, and synthesize representative scientific sources for the topic from several perspectives (for example, economic, ethical-environmental, -and health) relevant to the topic;
- apply best practices for conducting methodological searches in the literature review;
- write a comprehensive and balanced, opinionated literature review that deeply explores the issues in the area of study, leading to new insights in academic language;
- clearly define the purpose and objectives of the literature review;
- draw conclusions related to the literature research problem and give recommendations towards new research opportunities, applications and consequences for the field;
- argument a statement using the information from literature, including counter arguments.
- manage the individual learning process, including time management and adequate planning (minimally exceeding allotted time);

Rub	ric: MSc Literature Revi	ew Student name:	Student number:	Date:	Course code:			
	Criteria	Excellent (10-9)	Good (8)	Satisfactory (7)	Poor (6)	Insufficient (<6)	Comments and feedback	
Content of written report (65%)	Introduction	Offers a strong, clear, and thorough, yet concise, overview of the research problem leading to a specific, clear, and answerable research question. Describes the scientific, practical (engineering) and social relevance and adds a substantial new perspective or insight to the field. The relevance is described excellent from several perspectives (e.g., economic, ethical, environmental, social, medical, health) and technological developments.	answerable research question. Describes the scientific (engineering) and social relevance and adds a new perspective or insight to the field. The relevance is described from several perspectives (e.g., economic, ethical, environmental, social, medical, health) and technological developments.	research problem leading to a specific, clear, and	The introduction offers a limited selection of relevant literature, and the research problem misses focus. The research question is unclear.	The introduction does not offer a selection of relevant literature and the research problem misses. The research question is unanswerable/missing.		
	Literature retrieval/ documentation	The report includes all relevant parts of the research	The report includes relevant parts of the research field, has a good focus, is up to date. The review is based on a thorough, documented search strategy in scientific papers, book chapters, theses, or patents and it is well-documented with appropriate references and citations. However, there may be some minor gaps in the documentation or some tools	The report covers relevant parts of the research field with a focus that is sufficient. The review is based on a documented search strategy in scientific papers, book chapters, theses, or patents and it is adequately documented, with appropriate references and citations. However, there may be		The report does not cover relevant parts but also lacks main themes. The review is not based on a documented search and it is completely lacking in documentation or references. It is impossible to replicate the review based on the information provided.		Final grade
	Body / literature synthesis	The body/literature synthesis is an excellently critical and in-depth¹ evaluation of the literature, which is technically correct. The interpretation of the literature is convincing, comprehensive and balanced, opinionated that deeply explores the issues in the area of study, leading to new insights.	information. The interpretation of the literature is convincing, comprehensive and balanced, opinionated that deeply explores the issues in the	critical evaluation of the literature with satisfactory technical information. The interpretation of the	synthesis of information is poorly opinionated and hardly explores issues in the area of study. The	Absent display of the literature. A critical synthesis of information with an exploration of issues in the area of study is missing, proper technical information is missing.		
		The discussion is an excellent critical and in-depth reflection on the findings, integrating the new findings with the current state of (technical) knowledge very well, and corresponds with the research question. The results are discussed in the light of the research problem. Excellent depth of the contribution achieved making use of the existing literature with new insights, new models, and hypotheses discussed. Recommendations are to-thepoint and well-linked to the findings; the formulated research plan follows logically and consistently from the given conclusions and recommendations.	current state of (technical) knowledge well, and corresponds with the research question. The results are discussed in the light of the research problem. New insights, new models, and hypotheses are discussed. Recommendations are linked to the findings; the formulated research plan follows	The discussion is a reflection on the findings and corresponds with the research question but has room for improvement. Integrating new findings with the current state of (technical) knowledge is sufficient. The results are discussed in the light of the research problem. New insights, new models, and hypotheses are discussed. Recommendations are linked to the findings; the formulated research plan follows from the given conclusions and recommendations.	In the discussion, connections with findings from the literature synthesis are hardly made and a link to the research question is not established. New (technical) findings are hardly integrated. Recommendations are absent or trivial. The formulated research plan does not follow logically from the given conclusions and recommendations; the formulated research plan does not follow logically and consistently from the given conclusions and recommendations.	discussed. Recommendations are missing and the formulated research plan does not follow from the given conclusions and recommendations. The		
Structure and Style (10%)	Structure and reasoning	The line of reasoning is easy to follow and supported by the structure and follows the generic literature review structure. Consistently makes well-informed and rational decisions about the content and structure of the writing, showing a high level of critical thinking and self-awareness.	the legibility of the text and follows the generic literature review structure. Generally, makes well-informed and rational decisions about the content and structure of the writing, demonstrating critical thinking and self-awareness well.	supports the legibility of the text and follows the generic literature review structure in a satisfactory	badly structured Makes few well-informed and rational decisions about the content and structure of the writing, demonstrating little critical thinking or	The line of reasoning is absent, and the paper is very badly structured. Makes no well-informed or rational decisions about the content and structure of the writing, showing no critical thinking or selfawareness.		ıture
	Citations and reference list	Citations are independently adjusted to the dominant style of the field? and consistent, complete and correct in an academic style. Citations and reference list include all resources cited in the review and corresponds perfectly with the academic annotation- style.	correct in an academic style. Citations and reference	place, used consistently and correctly throughout the review. Citations and reference list are properly	academic format for citations and the reference list	The citations in the text are absent or incorrectly cited. An academic format for citations and the reference list has not been used.		Supervisor signa
	Use of academic language	Proficient use of academic language, the use of English is always consistent in use of either British or American English. The use of (technical) language is scientific, nuanced, logical, and clear. Language errors, spelling mistakes/grammatical errors are exceptionally rare.	English is mostly consistent in use of either British or American English. The use of (technical) language is mostly scientific, nuanced, logical, and clear. Language errors, spelling mistakes/grammatical	English is mostly consistent in use of either British or American English. The use of (technical) language is mostly scientific, nuanced, logical, and clear.	English is not consistent in use of either British or American English. The use of (technical) language is not scientific, nuanced, logical, and clear. Regular language errors, spelling mistakes/grammatical	Advanced use of academic language, the use of English is mostly consistent in use of either British or American English. The use of (technical) language is not scientific, nuanced, logical, and clear. A lot of language errors, spelling mistakes/grammatical errors.		
e skills (25%)	Scientific attitude	The student actively raises critical questions and suggestions and integrates suggestions, ideas and solutions of the supervisor, demonstrating flexibility and adaptability to changing research questions, priorities, or sources of information.	and integrates suggestions, ideas and solutions of the supervisor, demonstrating flexibility and adaptability to changing research questions, priorities, or sources of information.	supervisor, demonstrating flexibility and adaptability to changing research questions, priorities, or sources of information.	integrates suggestions, ideas and solutions of the supervisor, demonstrating flexibility and adaptability to changing research questions, priorities, or sources of information.	The student is not able to be critical and reflective and relies on supervisor's instructions only.		ше
Transferable	learning) process	Excellent management of the individual learning process, including time management and adequate planning (not exceeding allotted time). Changes to scope are strongly justified.	including time management and adequate planning (not exceeding allotted time). Changes to scope are	satisfactory, including time management and sufficient planning (not exceeding allotted time);	including time management and inadequate planning (exceeding allotted time with 1 – 4 days);	Manage the individual learning process inadequately, including time management and poor, inadequate planning (exceeding allotted time with > 5 days); scope not changed after iterations on request examiner.		Supervisor na

¹ The body/ literature synthesis shows integration of a variety of sources (for example, diversity in research methods, domain knowledge, time period).