Manual for use of MSc-internship assessment rubric (version 1.0) to be used in conjunction with the internship evaluation form of Wageningen University

User instructions

- The assessment form has the form of an analytic rubric (see e.g. Andrade (2005), Reynolds *et al.* (2009), URL1, URL2). Each line discusses one **criterion** for assessment. Each column gives a **level** for the grading. Each cell contains the **descriptor** of the level for that criterion.
- The criteria in the rubric exactly follow the items presented in the Excel worksheet “Internship evaluation Wageningen University” constructed by the OWI. In a few cases the criteria in the original thesis evaluation document were split into two or more parts because the description of the criteria clearly covered different subjects. The average mark for the different subject should be given in those cases. A mark should be given for all items mentioned in **bold**.
- Since the final mark is composed of so many criteria, the scores on individual criteria should be discriminative. Not all levels are equally broad in marks. Since the final marks of theses usually range between 6 and 9 individual levels have been established for the marks of 6, 7 and 8. When performance is at the 9-10 level, decide whether the student is on the low edge (9) or high edge (10) of this level. Descriptions at the 9-10 level tend to describe the ultimate performance (10). Hence, if a student performs well above 8, but below the description at the 9-10 level, a 9 would be the appropriate mark.
- Keep in mind that each line in the rubric should be read independently: it could be that a student scores a 2-3 on one criterion and a 9-10 on another.
- Always start at the lowest mark, and test if the student should be awarded the next higher mark. In some cases achievements of a next lower level are not repeated at the higher level (i.e. the lower level achievements are implicit in the higher levels). Furthermore, if a level has a range of marks, choose the most appropriate one (consider the description of the level of performance as a continuum, rather than a discrete description).
- Wherever the student is indicated as ´he´, one can also read ´she´.
- Please report any positive or negative experiences and suggestions to marjolijn.coppens@wur.nl.

Remarks

- The main intention of using a rubric is enhance homogeneity of assessments and the ability to communicate about assessments both with students and with colleagues. Furthermore, it clarifies to students the expectations of the supervisor and helps the supervisor to structure feedback during the process of thesis research.
  Although the intention is to homogenize the process of assessment, it should be noted that even with the use of a rubric some arbitrariness will remain.
- We suggest that all main categories (groups of criteria: research competence, thesis report, colloquium, examination) should have an assessment of 'sufficient' (i.e. a '6') before the total thesis work can be considered as sufficient. So, no compensation between main categories is possible to obtain a final mark of '6'.
- Author of the rubric: Marjolijn Coppens, with valuable contributions from Arnold F. Moene, Ralf Hartemink, Jan Philipsen, Maria Smetsers, Paul Hebinck, Tjeerd Jan Stomph, Judith Gulikers.

References

Andrade, H.G, 2005. Teaching With Rubrics: The Good, the Bad, and the Ugly. *College Teaching* **53**, p. 27-31.

Reynolds, J., R. Smith, C. Moskovitz and A. Sayle, 2009. BioTAP: A Systematic Approach to Teaching Scientific Writing and Evaluating Undergraduate Theses. *Bioscience* **59**, p. 896-903.

URL1: http://jonathan.mueller.faculty.noctrl.edu/toolbox/rubrics.htm (last visited November 17, 2009).

URL2: http://en.wikipedia.org/wiki/Rubric_(academic) (last visited November 17, 2009).

Appendix E: Rubric for assessment of MSc-Internship

Author: Marjolijn Coppens with contributions of Arnold F. Moene, Judith Gullikers, Jan Philipsen, Maria Smetsers, Paul Hebinck, Tjeerd Jan Stomph, Ralf Hartemink.

Based (in part) on 'Rubric for assessment of MSc-thesis' by Arnold F. Moene (Version: 1.0)

Item	**Mark for item**					
	2-3	**4-5**	**6**	**7**	**8**	**9-10**
A. Professional skills (20-50%) *						
1.1. Initiative and creativity	Student shows no initiative or new ideas at all.	Student picks up some initiatives and/or new ideas suggested by others (e.g. supervisor), but the selection is not motivated.	Student shows some initiative and/or together with the supervisor develops one or two new ideas on minor parts of the project.	Student initiates discussions on new ideas with supervisor and develops one or two own ideas on minor parts of the project.	Student has his own creative ideas.	Innovative methods and analysis of information/data. Possibly the idea for the project has been formulated by the student.
1.2 Insight in functioning of another organization	Student shows no insight in functioning of the organization.	Student shows no insight in functioning of the organization.	Student is able to draw an organization chart of the organization.	Student is able to indicate the position of the team within the organization as a whole.	Student is able to indicate the responsibilities of the different units within the organization.	Student knows how changes are realized in the organization.
	Student doesn't ask for help from the internship provider in case it is necessary.	Student doesn't ask for help from the internship provider in case it is necessary.	Student gets things (e.g. receiving information, organizing material facilities, etc.) done within the team only via internship supervisor.	Student is able to get some things (e.g. receiving information, organizing material facilities, etc.) done within the team. If necessary, the student asks for help of the supervisor to get things done within the team.	Student is able to get things (e.g. receiving information, organizing material facilities, etc.) done within the team independently.	Student is able to independently implement changes that affect the whole team.
1.3 Adaptation capacity	Student doesn't adapt and gives an impression of apathy or is often involved in disputes or arguments.	Student doesn't adapt and gives an impression of apathy or is often involved in disputes or arguments.	Student knows the do's and don't in the new work environment.	Student accepts how thing go within the new work environment.	Student is able to adapt to the new work environment.	Student adapts easily to the work environment within the limits of his personal values.

Item	Mark for item					
	2-3	**4-5**	**6**	**7**	**8**	**9-10**
1.4 Commitment and perseverance	Student is not motivated. Student escapes work and gives up regularly	Student has little motivation. Tends to be distracted easily. Has given up once or twice	Student is motivated at times, but often, sees the work as a compulsory task. Is distracted from work now and then.	The student is motivated. Overcomes an occasional setback with help of the supervisor.	The student is motivated and/or overcomes an occasional setback on his own and considers the work as his “own” project.	The student is very motivated, goes at length to get the most out of the project.
1.5 Independence	The student can only perform the work properly after repeated detailed instructions and with direct help from the supervisor.	The student needs frequent instructions and well-defined tasks from the supervisor and the supervisor needs careful checks to see if all tasks have been performed.	The supervisor is the main responsible for setting out the tasks, but the student is able to perform them mostly independently	Student selects and plans the tasks together with the supervisor and performs these tasks on his own	Student plans and performs tasks mostly independently, asks for help from the supervisor when needed.	Student plans and performs tasks independently and organizes his sources of help independently.
1.6 Handling supervisor's comments and development skills	Student does not pick up suggestions and ideas of the supervisor	The supervisor needs to act as an instructor and/or supervisor needs to suggest solutions for problems	Student incorporates some of the comments of the supervisor, but ignores others without arguments	Student incorporates most or all of the supervisor's comments.	Supervisor's comments are weighed by the student and asked for when needed.	Supervisor's comments are critically weighed by the student and asked for when needed, also from other staff members or students.
	Knowledge and insight of the student (in relation to the prerequisites) is insufficient and the student is not able to take appropriate action to remedy this	There is some progress in the professional skills of the student, but suggestions of the supervisor are also ignored occasionally.	The student is able to adopt some skills as they are presented during supervision	The student is able to adopt skills as they are presented during supervision and develops some skills independently as well.	The student is able to adopt new skills mostly independently, and asks for assistance from the supervisor if needed.	The student has knowledge and insight on a academic level, i.e. he explores solutions on his own, increases skills and knowledge where necessary.
	No learning outcomes formulated.	Learning outcomes formulated, but no progress in any of them.	On some of the personal learning outcomes the student shows some progress.	On all of the personal learning outcomes the student shows some progress.	On some of the personal the student shows major progress and on others some progress is shown.	On all personal learning outcomes the student has shown major progress.
1.7. Time management	No time schedule made.	No realistic time schedule.	Mostly realistic time schedule, but no timely adjustment of time schedule if necessary.	Realistic time schedule, with some adjustments if necessary (but not enough or not all in time) in times only.	Realistic time schedule, with if necessary timely adjustments of times only.	Realistic time schedule, with if necessary timely adjustments of both time and tasks.
	Final version of internship report or presentation more than 50% of the nominal period overdue	Final version of internship report or oral presentation at most 50% of the nominal period overdue (without a	Final version of internship report or oral presentation at most 25% of nominal period overdue (without valid	Final version of internship report or oral presentation at most 10% of nominal period overdue (without valid	Final version of internship report or oral presentation at most 5% of nominal period overdue (without good	Final version of internship report or oral presentation finished within planned period (or overdue but with

Item	Mark for item					
	2-3	**4-5**	**6**	**7**	**8**	**9-10**
	without a valid reason (force majeure)	valid reason).	reason)	reasons)	reasons)	good reason and finished within reasonable time).
B. Report internship (20-50%)						
2.1 Formulation goals, framework project	No goals and framework of project.	Formulation of goals and framework of project is not clear.	Formulation of goals and framework of project is clear, but link between tasks and goals is not clear. Framework of project does not fit with the object of the internship project.	Formulation of goals and framework of project is clear, but link between tasks and goals is not always clear.. Framework of project does not fit with all aspects of the internship project.	Formulation of goals and framework of project is clear.	Clear formulation of goals and framework of project. Both are well linked with all aspects of the internship project.
2.2. Theoretical underpinning, use of literature	No discussion of underlying theories.	There is some discussion of underlying theories, but the description shows serious errors.	Student has found the relevant theories, but the description has not been tailored to the project at hand or shows occasional errors.	Student has found the relevant theories, and has been partially successful in tailoring the description to the project at hand. Few errors occur.	Student has found the relevant theories, makes a synthesis of those, and has been successful in tailoring the description to the project at hand.	Clear, complete and coherent overview of relevant theories. Exactly tailored to the project at hand.
	No relevant literature in reference list except for those already suggested by the supervisor	Only a couple of relevant literature references in the reference list.	Some relevant literature in reference list but also significant body of irrelevant literature.	Relevant literature in reference list but some references are less relevant.	Used literature is relevant for the goal of the project. An occasional reference may be less relevant.	Used literature is relevant for the goal of the project.
2.3. Use of methods and processing data	No description of methods and analysis of the information/data.	Insufficient information on methods and insufficient analysis of the information.	Some aspects of the project regarding methods and analysis of information are described insufficiently. Used methods and analysis of data/information are not always appropriate.	Description of methods and analysis of information/data is lacking in a number of placed. Used methods and analysis of data/information mostly appropriate.	Description of methods and analysis of information/data is mostly complete, but there are lacking some details. Used methods and analysis of data/information are appropriate.	Description of methods used and analysis of the information is appropriate, complete and clear.
2.4. Reflection on results	No reflection on the results of internship project. Discussion only touches trivial or very general points of criticism.	Student identifies only some possible weaknesses and/or points at weaknesses which are in reality irrelevant or non-existent.	Student indicates most weaknesses in the results, but does not weigh their impact on the main results relative to each other.	Student indicates most weaknesses in the results and is able to weigh their impact on the main results relative to each other.	Student indicates all weaknesses in the results and weighs them relative to each other. Furthermore, (better) alternatives for the methods used are indicated.	Student is not only able to identify all possible weaknesses in the results, but is also able to indicate which weaknesses affect the outcome of the internship project most.
2.5. Conclusions and	No link between goals,	Conclusions are drawn, but	Conclusions are linked to	Most conclusions well-linked	Clear link between goals	Clear link between goals

Item	Mark for item					
	2-3	**4-5**	**6**	**7**	**8**	**9-10**
discussion	results and conclusions.	in many cases only address part of the goals. Conclusions merely repeat results or conclusions are not substantiated by results.	the goals, but not all goals are addressed. Some conclusions are not substantiated by results or merely repeat results.	to goals and substantiated by results. Conclusions mostly formulated clearly but some vagueness in wording.	and conclusions. All conclusions substantiated by results. Conclusions are formulated exact.	and conclusions. Conclusions substantiated by results. Conclusions are formulated exact and concise. Conclusions are grouped/ordered in a logical way.
	No discussion about the added value of the project for the organization.	Student assigns irrelevant aspects of the project as added value for the project for the organization.	Student only reflects on trivial aspects of his project for the organization and does not relate this to the goals of the organization.	Student is able to identify the added value of his project for the organization, but does not relate this to the goals of the organization.	Student is able to identify the added value of his project for the organization and relates this to the goals of the organization.	Student is able to identify the added value of his project and relates this to the goals of the organization. In addition, the student is able to indicate the added value of his project for the society as a whole.
2.6. Fluency of language and writing skills	Internship report is badly structured. In many cases information appears in wrong locations. Level of detail is inappropriate throughout.	Main structure incorrect in some places, and placement of material in different chapters illogical in many places. Level of detail varies widely (information missing, or irrelevant information given).	Main structure is correct, but lower level hierarchy of sections is not logical in places. Some sections have overlapping functions leading to ambiguity in placement of information. Level of detail varies widely (information missing, or irrelevant information given).	Main structure correct, but placement of material in different chapters illogical in places. Level of detail inappropriate in a number of places (irrelevant information given).	Most sections have a clear and unique function. Hierarchy of sections is mostly correct. Ordering of sections is mostly logical. All information occurs at the correct place, with few exceptions. In most places level of detail is appropriate.	Well-structured: each section has a clear and unique function. Hierarchy of sections is correct. Ordering of sections is logical. All information occurs at the correct place. Level of detail is appropriate throughout.
	Formulations in the text are often incorrect/inexact inhibiting a correct interpretation of the text.	Vagueness and/or inexactness in wording occurs regularly and it affects the interpretation of the text.	The text is ambiguous in some places but this does not always inhibit a correct interpretation of the text.	Formulations in text are predominantly clear and exact. Internship report could have been written more concisely.	Formulations in text are clear and exact, as well as concise.	Textual quality of the internship report is such that it could be acceptable for a peer-reviewed journal.
C. Self reflection on internship (10-30%)						
3.1 Report on self reflection	Is not able to describe an event or situation in which he was involved and that relates to a formulated learning outcome.	Is able to describe at least one event or situation in which he was involved and that relates to a formulated learning outcome but unable	Is able to describe at least one event or situation in which he was involved and that relates to a formulated learning outcome, properly	Is able to describe at least one event or situation in which he was involved and that relates to a formulated learning outcome, properly	Is able to analyze objectively most events or situations in which he was involved and that relates to formulated learning	Is able to analyze objectively any event or situation in which he was involved and that relates to formulated learning

Item	Mark for item					
	2-3	**4-5**	**6**	**7**	**8**	**9-10**
D. Presentation (5%)		to distinguish between the event description and the description of the personal emotions involved.	distinguishing between the event description and the personal emotions involved, but unable to formulate personal points of improvement and related actions in a future situation	distinguishing between the event description and the personal emotions involved, and able to formulate personal points of improvement and related actions in a future situation	outcomes, derive improvements for a future situation and formulate plan for improved functioning in a new situation. Shows the ability in at least one case to implement the formulated plan for improved functioning	outcomes, derive improvements for a future situation and formulate and implement a plan for improved functioning in a new situation.
4.1. Presentation: Graphs, PowerPoint	Presentation has no structure.	Presentation has unclear structure.	Presentation is structured, though the audience gets lost in some places.	Presentation has a clear structure with only few exceptions.	Presentation has a clear structure. Mostly a good separation between the main message and side-steps.	Presentation clearly structured, concise and to-the-point. Good separation between the main message and side-steps.
	Unclear lay-out. Unbalanced use of text, graphs, tables or graphics throughout. Too small font size, too many slides.	Lay-out in many places insufficient: too much text and too few graphics (or graphs, tables) or vice verse.	Quality of the layout of the slides is mixed. Inappropriate use of text, tables, graphs and graphics in some places.	Lay-out is mostly clear, with unbalanced use of text, tables, graphs and graphics in few places only.	Lay-out is clear. Appropriate use of text, tables, graphs and graphics.	Lay-out is functional and clear. Clever use of graphs and graphics.
4.2. Oral presentation and defense	Spoken in such a way that majority of audience could not follow the presentation.	Presentation is uninspired and/or monotonous and/or student reads from slides: attention of audience not captured	Quality of presentation is mixed: sometimes clear, sometimes hard to follow.	Mostly clearly spoken. Sometimes monotonous in some places.	Clearly spoken in such a way that I keeps audience's attention.	Relaxed and lively though concentrated presentation. Clearly spoken in such a way that I keeps audience's attention.
	Language and interest of audience not taken intro consideration at all.	Language and interest of audience hardly taken intro consideration.	Language and interest of presentation at a couple of points not appropriately targeted at audience.	Language and interest of presentation mostly targeted at audience.	Language and interest of presentation well-targeted at audience. Student is able to adjust to some extent to signals from audience that certain parts are not understood.	Take-home message is clear to the audience. Language and interest of presentation well-targeted at audience. Student is able to adjust to signals from audience that certain parts are not understood.
	Bad timing (way too short	Timing not well kept (at	Timing not well kept (at	Timing is OK (at most 10%	Presentation finished well in	Presentation finished well in

Item	Mark for item					
	2-3	**4-5**	**6**	**7**	**8**	**9-10**
	or too long).	most 30% deviation from planned time).	most 20% deviation from planned time).	deviation from planned time).	time.	time.
	Student is not able to answer questions.	Student is able to answer only the simplest questions	Student answers at least half of the questions appropriately..	Student is able to answer nearly all questions in an appropriate way.	Student is able to answer all questions in an appropriate way, although not to-the-point in some cases.	Student is able to give appropriate, clear and to-the-point answers to all questions.
E. Examination (5%)						
5.1 Defense of the report	Student is not able to defend/discuss his internship reports. He does not master the contents.	The student has difficulty to explain the subject matter of the internship project.	Student is able to defend his internship project. He mostly masters the contents of what he wrote, but for a limited number of items he is not able to explain what he did, or why.	Student is able to defend his internship project. He masters the contents of what he wrote, but not beyond that. Is not able to place thesis in scientific or practical context.	Student is able to defend his internship project, including indications how the work could have been done better. Student is able to place thesis in either scientific or practical context.	Student is able to freely discuss the contents of the internship project and to place the internship project in the context of current scientific literature and practical contexts.
5.2 Reflection on the internship	Is not able to describe an event or situation in which he was involved and that relates to a formulated learning outcome.	Is able to describe at least one event or situation in which he was involved and that relates to a formulated learning outcome but unable to distinguish between the event description and the description of the personal emotions involved.	Is able to describe at least one event or situation in which he was involved and that relates to a formulated learning outcome, properly distinguishing between the event description and the personal emotions involved, but unable to formulate personal points of improvement and related actions in a future situation	Is able to describe at least one event or situation in which he was involved and that relates to a formulated learning outcome, properly distinguishing between the event description and the personal emotions involved, and able to formulate personal points of improvement and related actions in a future situation	Is able to analyze objectively most events or situations in which he was involved and that relates to formulated learning outcomes, derive improvements for a future situation and formulate plan for improved functioning in a new situation. Shows the ability in at least one case to implement the formulated plan for improved functioning	Is able to analyze objectively any event or situation in which he was involved and that relates to formulated learning outcomes, derive improvements for a future situation and formulate and implement a plan for improved functioning in a new situation.