

ASSESSMENT FORM
MASTER RESEARCH PROJECT ASTRONOMY**STUDENT DETAILS**

Student name

Student number

Specialisation

RESEARCH PROJECT

Project type

Start date

Final date

Project title

Supervisor(s)

PLAGIARISM

% similarity

% acceptable?

ASSESSMENT

Use rubric, fill out & attach

Grade research: 27 EC

Grades are a number between 1 and 10. Half integers are also permitted, with the exception of 5.5.

Grade report: 3 EC

Provide feedback and explain the assessment (obligatory):

AGREEMENT

Name

Signature

1st Examiner
(research & report)

2nd Examiner
(report)

TO DO

- 1) Examiner submits this form + assessment rubric + report front page + summary to student and master@strw.leidenuniv.nl
- 2) Student needs a copy of this form for their own administration.
- 3) Student sends a digital version of the report to the programme coordinator at master@strw.leidenuniv.nl

Assessment rubric – Astronomy Research Projects – Leiden Observatory

Criteria	Insufficient (<6)	Sufficient (6 – 6.5)	Good (7 – 7.5)	Very Good (8 – 8.5)	Excellent (9 – 9.5)
RESEARCH					
Scientific Knowledge	At the end of the project, the student's knowledge was inadequate.	At the end of the project, the student still has some deficiencies, but does have basic understanding.	Possesses sufficient knowledge to be able to function during research. Read and understood recommended literature.	Possesses very good knowledge, and could deal with information in a critical fashion. On track for PhD level research.	As "Very Good". Regularly contributed new literature. Deep understanding of theoretical framework and broader Relevance.
Research Skills	The work has been careless. Unable to perform research at a basic level. Has not picked up the main skills during the project.	The student had difficulty with overcoming hurdles. Took long time to learn new skills. Often the work is lacking scientific accuracy.	Student was able to learn new skills adequately. Making decisions on her/his own was difficult. Precision of work was sufficient.	Very precise. Quickly learned new techniques. Is able to take independent decisions about adjustments. On track for PhD level research.	As "Very Good". Saw connections beyond set-out boundaries. Proposed and carried out adjustments not instigated by supervisor. Obvious PhD candidate.
Interaction & Independence	The student was not able to do even simple steps by themselves. Communication was inefficient.	The student needed to be firmly guided. Overly detailed instructions were required to ensure progress.	Student can work independently. Generally asked advice and approached the supervisor to discuss research.	Worked as an independent researcher. Asked relevant and innovative questions during meetings. On track for PhD.	As "Very Good". E.g. arranged for collaboration and/or advice with others, outside normal scope.
Level and Quality of Research	The level and/or quality of research did not supersede that of simple practicals. Not enough for a research thesis.	The level and quality of the research are sufficient. Some results may not withstand a more thorough analysis.	Fulfilled parts of the potential of the research project. Some parts of the work may not be reliable.	Fulfilled most of the potential of research project. Reliable results. Could result in publication. On track for PhD.	As "Very Good". Clearly exceeded the goals of the research project that let to new scientific insights. Excellent interpretation.
Student Motivation	Periods of absence without reason. Student cuts corners. Not interested in the research.	Completed project with minimum effort, but showed little interest beyond. Time spent on research barely sufficient.	Worked well. Made use of advice and criticism. Clearly interested in research.	Worked hard and sees scientific research as an essential part of astronomy. Source of great enthusiasm. Eager to show results.	As "Very Good". Very active and hard working. Passionate, wanting to know everything about the subject.
REPORT					
Introduction and problem definition	Introduction shows insufficient understanding of research topic. Problem/hypothesis is not defined. Poor use of literature.	Introduction is missing depth and coherence. Problem, hypothesis is poorly defined. Some relevant literature missing.	Well-structured introduction. Refers to relevant literature. Wider context well described. Superficial in some places.	Very well written introduction, referring to almost all relevant literature. Sharply defined hypothesis.	Introduction meets all criteria of a thorough scientific report and could be used for a publication.
Description of methods	Not enough details to understand methodology. Imprecise descriptions. Cannot be used to repeat research.	Most of the used methods are described, but still some important info is missing. Too many/too few details given.	All methods have been described, but sometimes too few/many details. Possible for others to repeat experiment.	Methods are well described. All information is available.	Clear and concise and could directly be used for a scientific report or publication.
Results & Discussion	Key figures are missing or unclear. Results are not sufficiently presented nor discussed.	All results are presented, but lacking coherence. Low quality of figures. Relevance unclear.	Coherent, good quality figures and tables. Own finding placed in a wider context, but superficial at times.	Well-presented results, discussion with the right depth. Good placement of findings in a broader research area.	Meets all criteria for a thorough scientific report. Excellent placement of own findings in a broader research area.
Scientific Writing	Used language that is unsuitable for the purpose. Comprehension almost impossible. Vague and imprecise. Many grammatical errors.	Language is not always scientific and precise. At some points vague and difficult to follow. Some grammatical errors.	Language is scientific and precise. Mostly clearly written and good to follow. No grammatical errors.	Clearly written report, in good scientific language. Articulate. Would need some work for scientific report/publication.	Very persuasive. A highly articulate paper of publishable quality – with very little help from supervisor.

RESEARCH PROJECTS

The student is expected to spend 30 EC on both the First Research Project and the Master's Research Project. As 1 EC equals 28 hours of work, each project equals 30 EC * 28 hours per EC = 840 hours of work. Both research projects conclude with a report (thesis). For the Master's Research Project, the total credit also includes public presentation (the Student Colloquium). The First and Master's Research Projects must be on different topics. The Master's Research Project can be started only after successful completion of the First Research Project.

COLLOQUIUM

You have to make your own reservation for the colloquium on: Sterrewacht homepage -> Local Pages -> Master Colloquium

Note: The colloquium can only be given on certain dates. The reservation is your own responsibility!

DEADLINES

The maximum duration of any Research Project is 9 months. You need to hand in the thesis on the deadline stated below. Hand in a digital copy to your supervisor, study advisor and also a paper copy to the programme coordinator.

First Research Project

The deadline for the First Master Project is 1 August for students who started the programme in September, if the First Research Project is started before 1 November of the first year. For students who started the programme in February this deadline is extended to 11 January if the First Research project is started before 1 April of the first year.

Master's Research Project

For the Master's Research Project the deadline is 1 July for students who started the programme in September and 1 December for students who started the programme in February.

PAGLIARISM

The report will be checked on plagiarism. If plagiarism is proven, the Board of examiners will impose penalties.

GRADING

The research project will be evaluated both by the supervisor(s) of the project and by another staff member not directly connected to the same research project (the second reader). Both the supervisor(s) (1st examiner) and the second reader (2nd examiner) have to be approved staff members with examination authority in order to grade the project. The project will be evaluated on the nine points stated in the assessment rubric.

PROGRESSION

To monitor the progression of the research projects you will receive periodic emails at so-called milestones. These milestones occur at the start of the project and at 25%, 50%, 75% and 100% of the allotted duration of the project. These emails contain information about the remaining time until the end date (at 100%). If the project has not been completed by the final date (100%), a grade will be given based on the available material. Student and supervisor should monitor progress with this schedule in mind. Problems or delays should be reported to the study advisor, who will also monitor progress. The finished report has to be sent to the supervisor(s), the programme coordinator (masters@strw.leidenuniv.nl) and the study advisor on the day of the final deadline at the latest!

ISSUES

Should personal problems, problems with your project or problems with your supervisor occur which you would prefer to discuss confidentially, contact the Astronomy study advisor Wouter Schrier (Oort 567), studyadvisor@strw.leidenuniv.nl