**Grading criteria for independent projects at Master’s level (120 credits) A2E, 30 credits, in biology, environmental science, food science, soil science, chemistry, technology and agricultural science, at the NJ Faculty at SLU. Valid from the autumn semester 2019.**

These criteria are a temporary adaptation of the criteria from 2014 to the syllabuses introduced in the autumn 2018, intended for use until new criteria are issued by the *Programnämnd at the NJ faculty*. Each row in the table below represents an objective in the *old* syllabus, the columns represent the grade levels. The achieved grade level for each objective is entered in the rightmost column. Note that the criteria for the underlying grading level must be met for a higher grade to be possible. *Example:* *If all sub-criteria for grades 3 and 4 are met for objective 1, a four (4) is set for objective 1.* *If all sub-criteria for grade 3 are met for objective 2, only one of the sub-criteria for grade 4, but all sub-criteria for grade 5, a three (3) is set for objective 2.*

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| **Objective****The student, through the independent project, should advance his/her subject knowledge in the area.** | For **grade level 3** for each objective, the following must be met  | For **grade level 4** for each objective, the following must be met  | For **grade level 5** for each objective, the following must be met  | Grade level for the objective |
| Objective 1**After completing the course, the student should be able to identify, delimit and formulate scholarly problems in the chosen problem area, based on previously acquired knowledge.** | [ ] [ ] [ ] [ ] [ ]  | *All of the following sub-criteria:*The student has demonstrated the ability to place his/her work in a larger context.*Agriculture Programme – Soil and Plant Sciences only*: The student has related the scientific questions to the complex system of resources and value-creating processes of the agricultural sectorThe student has demonstrated advanced knowledge in the subject area of the work.The student has demonstrated insight into current research issues in the field.To the extent it is relevant with regard to context and objectives of the work, the student has paid attention to ethical and societal aspects and to sustainability. | [ ]  | *The following criterion:*The student's proposal for a new or expanded question demonstrates that the student has a good understanding of the field in which the student has conducted the project.  |  | Not possible for objective 1 | Click here to enter text. |

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| Objective 2**After completing the course, the student should be able to independently plan and perform a qualified scientific investigation.**  | [ ] [ ] [ ] [ ]  | *All of the following sub-criteria:* The student has completed the project in a responsible manner.The student has demonstrated the ability to judge the plausibility of his/her findings and place them in a relevant context.The student has demonstrated the ability to reflect on the choice of method.The student has demonstrated the ability to take his/her own initiatives in discussion and consultation with the supervisor. | [ ] [ ] [ ] [ ]  | *Two of the following four sub-criteria*The student has demonstrated the ability to reflect on the choice of method.The student has demonstrated a good ability to evaluate findings and place these in a larger context.During the project, the student has demonstrated the ability to identify questions/problems that have arisen and has handled these in an independent manner.The student has demonstrated during the work that he/she can apply the appropriate precision to different stages. | [ ] [ ] [ ]  | *All of the following sub-criteria:* The student has demonstrated great ability to take initiative and contribute his/her own ideas and solutions in discussion and consultation with the supervisor.The student has completed the project within the time frame of the individual work plan (cf. [guidelines for education](https://internt.slu.se/Organisation-och-styrning/styrande-dokument/styrande-dokument/3-utbildning-pa-grundniva-och-avancerad-niva-/), chapter 4, document on examination and assessment, *tidsgräns för överbetyg*).The student has, if given the opportunity, actively participated in discussion on the choice of method. | Click here to enter text. |
| Objective 3**After completing the course, the student should be able to independently seek, evaluate, critically interpret and compile relevant information.** | [ ] [ ]  | *All of the following sub-criteria:* The student has demonstrated ability to interpret and evaluate the content of the sources used.The student has demonstrated the ability to independently compile and analyse his/her data. | [ ] [ ]  | *All of the following sub-criteria:* The student has demonstrated the ability to independently compile and analyse his/her data.The student has in a clear way related his/her own findings to original scholarly literature in the area. | ☐ | *The following criterion:*The student has demonstrated a very good ability to independently and thoroughly evaluate and critically interpret his/her own findings.  | Click here to enter text. |
| Objective 4**After completing the course, the student should be able to make a written English1) presentation of scientific findings in the chosen problem area.****1)** If the course is given in Swedish (see course syllabus) the report may be written in English or Swedish. | [ ] [ ] [ ] [ ] [ ] [ ]  | *All of the following sub-criteria:* The written presentation is in English 1).The student has handled formalities properly.The student has used scholarly language and a vocabulary appropriate to the subject.The tables and figures used in the project are relevant and have been handled and presented properly.The project is within the given constraints (such as scope).The material is ready for publication in accordance with applicable SLU guidelines. | [ ] [ ] [ ]  | *All of the following sub-criteria:* The written project is linguistically thorough with good readability, which includes a well-planned and correct choice of words, correct sentence structure, grammar and spelling.The written project exhibits a cogent, rigorous and concise argumentation.The student has selected tables and figures that considerably enhance the reader's understanding of the work. | [ ]  | *The following criterion:*The structure, argument and analysis of the written project demonstrate that the student has a very good understanding of the field. | Click here to enter text. |
| Objective 5**After completing the course, the student should be able to report and discuss results orally.** | [ ] [ ] [ ]  | *All of the following sub-criteria:* The oral presentation is clear and has a well-planned structure.The presentation reports the findings obtained and the conclusions in a scientific manner.The oral presentation remained within the given constraints regarding time and scope. | [ ] [ ]  | *All of the following sub-criteria:* In the oral presentation, the student has demonstrated sensitivity towards the audience by the way he/she responded to questions or through dialogue with the audience.The oral presentation is clear and concise in performance and argument. |  | Not possible for objective 5 | Click here to enter text. |
| Objective 6**After completing the course, the student should be able to summarise a scholarly work in the chosen problem area for an audience interested in popular science.** | [ ]  | *The following criterion:*Language, structure, message and scope have been adapted to a target group interested in popular science. |  | Not possible for objective 6 |  | Not possible for objective 6 | Click here to enter text. |
| Objective 7**After completing the course, the student should be able to provide constructive criticism on the texts and presentations of others.** | [ ] [ ]  | *The following criterion:*The oral **and written** work of the reviewer shows that he/she has familiarised himself/herself with the work and done substantial preparations for the review.The criticism involves methods, conclusions and the wider scientific or practical context |  | Not possible for objective 7 |  | Not possible for objective 7 | Click here to enter text. |

**Weighted grades**

The overall grade is derived from the attained grade level of the individual objectives (rightmost column in the table above), and is tested from the "top down" as shown below.

For a weighted **grade 5** it is required that the student has achieved a minimum of one of the combinations in the table below, i.e.

* no grade below 3 for any of the objectives;
* *and* grade 5 for objectives 3 and 4;
* *and* the highest possible grade either for objective 1 (combination 1) *or* for objectives 2 and 5 (combination 2).

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|  | Highest possible grade |  | Grade levels for grade 5 |
| Objective |  | Combination 1 | Combination 2 |
| Objective 1 | 4 |  | **4** | 3 |
| Objective 2 | 5 |  | 4 | **5** |
| Objective 3 | 5 |  | **5** | **5** |
| Objective 4 | 5 |  | **5** | **5** |
| Objective 5 | 4 |  | 3 | **4** |
| Objective 6 | 3 |  | 3 | 3 |
| Objective 7 | 3 |  | 3 | 3 |
| Select the combination that may have been met by the student |  |  | [ ]  | [ ]  |

For a weighted **grade 4** it is required that the student has achieved a minimum of one of the combinations in the table below, i.e.

* no grade below 3 for any of the objectives;
* *and* grade 4 for both objectives 3 and 4;
* *and* grade 4 either for objectives 2 and 5 (combination 1) *or* for objectives 1 and 2 (combination 2) *or* for objectives 1 and 5 (combination 3).

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|  | Grade levels for grade 4 |
| Objective | Combination 1 | Combination 2 | Combination 3 |
| Objective 1 | 3 | **4** | **4** |
| Objective 2 | **4** | **4** | 3 |
| Objective 3 | **4** | **4** | **4** |
| Objective 4 | **4** | **4** | **4** |
| Objective 5 | **4** | 3 | **4** |
| Objective 6 | 3 | 3 | 3 |
| Objective 7 | 3 | 3 | 3 |
| Select the combination that may have been met by the student | [ ]  | [ ]  | [ ]  |

For **grade 3** (approved), it is required that the student has achieved grade level 3 for all objectives.

The weighted grade is entered below:

**Grade:** [ ] U [ ] 3 [ ] 4 [ ] 5