

Guidance for choosing a grading scale

As decided by the Vice-Chancellor (xxx), several different grading scales are used at Uppsala University (see below). The relevant disciplinary domain board/faculty board or equivalent body decides which grading scale will be used for a certain course/programme. The grading scale will be specified in the syllabus and the same scale will be used for all students taking the course.

A decision on the grading scale to be used for a certain course or programme should take account of the nature of the course or programme and any particular circumstances associated with it. The relevant factors may range from educational considerations to international aspects and other dimensions. This guidance document is intended to provide support and assistance in the task of choosing a suitable grading scale for a specific course/programme.

Grading scales

The following grading scales are available for use at Uppsala University:

- Two levels: Fail (U), Pass (G)
- Three levels: Fail (U), Pass (G), Pass with distinction (VG)
- Four levels: Fail (U), Pass (3), Pass with credit (4), Pass with distinction (5), *or* Fail (U), Pass (B), Pass with credit (Ba), Pass with distinction (AB)
- Six levels: Fail (F), Sufficient (E), Satisfactory (D), Good (C), Very good (B) Excellent (A)

National governing documents

Higher Education Ordinance, Chapter 6

Grades

Section 18

Unless otherwise provided by the higher education institution, a grade shall be awarded on completion of a course. The higher education institution may determine which grading system is to be used. Successful completion of courses in programmes leading to the award of a qualification as a pre-school teacher, primary teacher, secondary or upper-secondary school teacher, or vocational teacher that either entirely or to some extent include placement must, however, always be graded at more than one level. This only applies if the placement element in the course comprises more than three higher education credits.

The grade shall be determined by a teacher specifically nominated by the higher education institution (the examiner).

Goal-related grading system

Swedish higher education institutions have no tradition of relative grading systems, i.e. of ranking students with reference to one another and allocating grades in accordance with set proportions. Instead, they have generally used criterion-referenced grading systems in which every student can achieve a certain grade, regardless of how other students perform. The criterion for a certain grade

may for example be a certain percentage of the points available in a written assessment or a certain course attendance rate. In connection with the Bologna Process, the terms 'intended learning outcomes' and 'goal-related grades' began to be used.

Goal-related grades are a type of criterion-referenced grades. In a goal-related grading system, the grade indicates what a student knows/can do at the end of the course, and how well they know/can do it. Criterion-referenced grades based on adding up points are generally not goal-related. The intended learning outcomes of the course (goals) indicate the knowledge or skills that all students are supposed to attain and the different grades indicate the level of their performance. At Uppsala University we will strive to grade accordingly, i.e. based on the student's performance relative to the intended learning outcomes of the course.

Relative grades

Criterion-referenced grades

Goal-related grades

Example: The student's results are in the top 5 per cent.

Example: The student has received more than 60% of the total possible points for the exam.

Example: The student's results meet the pass criteria for each intended course learning outcome.

Fig 1. Relationship between relative, criterion-referenced and goal-related grades

Educational considerations when choosing a grading scale

For every course, the relevant disciplinary domain board/faculty board or equivalent needs to select a grading scale. All students taking a particular course must be graded using the same scale. If the scale is revised, the course must be recreated with a new course code.

The choice of grading scale will have various types of consequences and it is important to consider these when choosing which scale to use for a course, a subject or a degree programme.

It is important to bear in mind that, whatever the grading scale, a pass grade must reflect that the student has attained the course learning outcomes sufficiently well. Consequently, the bar for the lowest pass grade must be set at this level, no matter how many grades there are in the grading scale for the course. This is illustrated in the figure below.

Fig 2. Illustration showing that the threshold for the lowest pass grade must be set at a comparable level, no matter which grading scale is chosen. Note that the level required for the different grades is determined by the course examiner.

Research on different grading scales

There is relatively little research on Swedish grading systems in higher education and their effects. Many of the studies made on the effects of different grading scales come from the United States and often compare a six-grade scale with an even more highly differentiated scale. This does not correspond to the scales we use in Sweden. Many other studies compare pass-fail scales with scales that differentiate between five pass grades, which makes it difficult to draw conclusions about scales in between these (two or three pass grades). This guidance document includes a number of references in the form of Swedish reports and articles, and a number of foreign articles considered relevant for anyone wishing to read more on the subject.

The impacts on students and teachers listed below will naturally be influenced by several factors, of which the grading scale is one.

Read more: Adolfsson, H., Dalnäs, U., Gerén, L., Hellström, M., Kjellgren, K., Knutson Wedel, M., Noori K. & Oldsjö, F. (2016). Betyg i högre utbildning. SUHF

Ekecrantz, S. (2007). Målrelaterade betyg. Att arbeta med betygskriterier och bedömning i sju grader. UPC-rapport 2007:1. Stockholm: Stockholm University.

Impact on students

Motivation

There are no clear-cut studies that show unambiguously how different grading scales affect motivation. Many authors consider that the possibility of striving to achieve a higher grade than a mere pass level motivates students, but several studies have suggested the opposite. According to one of the studies, this appears to be true in particular of low-achieving students.

Read more: Schinske, J. & Tanner, K. (2014). Teaching more by grading less (or differently). *CBE – Life Sciences Education*, 13(2), 159–166.

McClure, J. E. & Spector, L. C. (2005). Plus/minus grading and motivation: an empirical study of student choice and performance. *Assessment & Evaluation in Higher Education*, 30(6): 571–579.

Learning

Studies have shown that an excessive focus on grades, which is a risk of multi-level grading scales, is less conducive to a deep approach to learning. Students graded on a scale with multiple levels say that assessments focus on less central parts of the course, that the focus is on reproduction of knowledge and that the questions aim at lower cognitive levels. Students graded on a multi-level scale also exhibit a greater tendency to focus on studying old examinations. However, it is important to be aware that many other factors besides the grading scale influence students' learning.

Read more: Dahlgren, L-O., Fejes, A., Abrandt-Dahlgren, M. & Trowald, N. (2009). Grading systems, features of assessment and students' approaches to learning. *Teaching in Higher Education*, 14(2): 185–194.

Stress

Studies have shown that students taking courses that only have one pass grade experience lower stress levels than students graded using multi-level scales. Here, too, other factors naturally influence the stress experienced by students.

Read more: Reed, D. A., Shanafelt, T. D., Satele, D. W., Power, D. V., Eacker, A., Harper, W., Moutier, C., Durning, S., Massie, F. S. Jr., Thomas, M. R., Sloan, J. A. & Dyrbye, L. N. (2011). Relationship of pass/fail grading and curriculum structure with well-being among preclinical medical students: a multi-institutional study. *Academic Medicine*, 86(11): 1367–73.

Comparability

It can be an advantage for students if the grading scale used is similar to that used for equivalent courses and programmes at other Swedish higher education institutions. This applies in particular to vocational education and training programmes. When applying to more advanced studies or future employment, a student who has been graded on a scale with few levels may potentially be at a disadvantage compared with someone who has high grades on a multi-level scale. This is particularly significant in an international perspective, as described more closely in the relevant section below.

Read more: Adolfsson, H., Dalnäs, U., Gerén, L., Hellström, M., Kjellgren, K., Knutson Wedel, M., Noori K. & Oldsjö, F. (2016). Betyg i högre utbildning. SUHF.

Impact on teachers

Design of assessments

Use of a multi-level scale increases the risk that assessments will focus on things that are easy to measure fairly rather than on meaningful tasks. The reliability of the assessment may be regarded as more important than its validity. There may also be a risk of choosing a mode of examination that fits the grading scale rather than the most appropriate mode. Being aware of this can reduce the risk.

Read more: Dahlgren, L-O. & Fejes, A. (2005). ECTS-skalan – Att mäta eller mota lärande? *Pedagogisk forskning i Sverige*, 10(1): 24–34.

Weighting

Final grades are set for a whole course. When a multi-level grading scale is used, this requires reflection on how to weight the various component assessments in the final grade. Reflection is also required on whether all intended course learning outcomes or all assessment components can be attained at all grade levels.

Read more: Ekecrantz, S. (2007). Målrelaterade betyg. Att arbeta med betygskriterier och bedömning i sju grader. UPC-rapport 2007:1. Stockholm: Stockholm University.

Workload

A grading scale with multiple pass grades may mean that teachers have to devote more time to assessments. Grading issues require more time, both for formulating relevant criteria for the various grades and for drawing a line between different grades. Studies have shown that scales with few grade levels can result in students being less inclined to question their grades, since fewer perceive themselves to be close to the threshold to a higher grade. If more of a teacher's time goes to grading issues, there is a risk of spending less time on reflection and course development.

Read more: Dahlgren, L-O. & Fejes, A. (2005). ECTS-skalan – Att mäta eller mota lärande? Pedagogisk forskning i Sverige, 10(1): 24–34.

Schinske, J. & Tanner, K. (2014). Teaching more by grading less (or differently). CBE – Life Sciences Education, 13(2), 159–166.

Peterson, C. M. & Peterson, T. O. (2016). Affecting student perception and performance by grading with 10,000 points. Journal of Management Education, 40(4): 415–431.

Internationalisation

Most countries have more differentiated grading scales than Sweden. Even if some countries use scales that look similar, e.g. A-F, it cannot be taken for granted that they mean the same thing. For example, E is perceived as a pass grade in Sweden but this is not necessarily the case everywhere a similar scale is used. This may potentially be a problem if someone who has to interpret a grade awarded in Sweden is unfamiliar with what it means in Sweden. Similar grading scales can therefore give an impression of comparability that is merely an illusion.

A scale with few levels can be problematic from the perspective of internationalisation. Problems can arise both for Swedish students applying to study at a foreign university and for exchange students or other foreign students who want to use their grades from Uppsala at other universities. Students who have received grades on a scale with few levels may be at a disadvantage compared with students who have received grades on a scale with more levels, as the performance band for each grade is broad and the performance is then usually compared with the lowest comparable level. In some cases Uppsala University students have encountered difficulties in their subsequent career because of our grading scales and qualifications without grades.

Read more: Adolfsson, H., Dalnäs, U., Gerén, L., Hellström, M., Kjellgren, K., Knutson Wedel, M., Noori K. & Oldsjö, F. (2016). Betyg i högre utbildning. SUHF.

Dahl, B., Lien, E. & Lindberg-Sand, Å. (2009). Conformity or confusion? Changing higher education grading scales as a part of the Bologna process: the cases of Denmark, Norway and Sweden. Learning and Teaching, 2(1): 39–79.

Dahlgren, L-O. & Fejes, A. (2005). ECTS-skalan – Att mäta eller mota lärande? Pedagogisk forskning i Sverige, 10(1): 24–34.

Conversion of grades

There is no official conversion guide between different grading systems. It is virtually impossible to convert grades fairly from a scale with few levels to a scale with more levels. To be able to say which grade a student has achieved on a more differentiated scale, the assessment must have been made from the start in a way that makes it possible to judge.

One resource that can be used is an ECTS grading table (EGT). This table specifies the distribution of pass grades for each grade awarded for a course, for example the percentage receiving the grades U, G or VG. This can provide a clue to how difficult it is to receive the top grade. However, many feel this does not give sufficient information on what a certain grade is 'worth'.

There are agreements on conversion tables in certain connections, for example, for international Master's programmes given jointly by Uppsala University and another European university. In the case of close cooperation or a joint programme with a university that uses a different grading scale, it may be a good idea to agree on how grades will be converted.

Students' views

When students are asked what sort of grading scale they prefer, they tend to prefer the grading scale with which they are familiar, regardless of how many pass grades it has.

At national level, the Swedish National Union of Students has not taken a clear position on grading scales, apart from expressing the view that the grading system chosen should be appropriate for the course or programme concerned and should facilitate mobility.

The students' unions at Uppsala University have not issued any joint opinion on the issue but on balance, the different unions' manifestos show that most of the unions are in favour of scales that are not too differentiated. Some of them comment that the same grading scale should be used throughout a faculty and that national comparability is an advantage.

Read more: National Agency for Higher Education. (2007) Studentspegeln. Report 2007:20 R, p. 53.

Students' unions manifestos:

https://www.sfs.se/sites/default/files/o11_17_1617_sfs_principprogram.pdf

http://www.uppsalastudentkar.se/sites/default/files/bifogade/160309_asiktsprogram_2015_reviderat_0.pdf

<http://www.farmis.se/wp-content/uploads/2016/07/FaS-%C3%85siktsprogram->

<http://uppsalaekonomerna.se/content/uploads/2018/01/Asiktsprogram.pdf>

<http://jf-uppsala.se/content/uploads/2017/06/Asiktsprogram.pdf>

<https://drive.google.com/drive/folders/0B8uSEPFZ2uc7c0dMcno2M0dJMUE>

Summary

There are many factors to take into account when choosing grading scales and needs vary between different courses and degree programmes. For example, an international Master's programme may see advantages in a multi-level scale while an internship course in a vocational programme (other

than those regulated by the Higher Education Ordinance) may prefer a pass/fail grading scale. When choosing a grading scale, it is desirable to consider which factors are most important for the course/programme concerned.

Table 1: Summary of overall arguments for grading scales with few/multiple levels

Arguments for few levels	Arguments for multiple levels
<ul style="list-style-type: none"> • Less stressful for students • Focus on learning • Less burdensome for teachers • Greater flexibility in design of assessments 	<ul style="list-style-type: none"> • Advantage from perspective of internationalisation • Possibility of greater precision and fairness • Better selection tool

Questions to think about when choosing a grading scale

- Which grading scale is most appropriate considering the nature of the course/programme?
- Does the course contain assessment components that offer good ways of assessing qualitative differences in goal attainment?
- Are there advantages to having a scale that is comparable to similar programmes at other universities in Sweden?
- Are a large percentage of the students in the course/programme international students or students who plan further studies/work abroad?
- Does the course contain components in which it may be difficult to assess students at different levels (e.g. internship or other assessment components in which the grade is based on a supervisor's report)?
- Could more differentiated grades give students a competitive edge in the future?