

Freie Universität Berlin

# **Guidelines for the**

# **Publication of Examination Results**

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### **Summary**

Purpose	Guidelines for the publication of examination results
Contents	Treatment of aspects relevant to data protection; manual of procedures
Target audience	All instructors at Freie Universität Berlin
Applies to	Freie Universität Berlin
Validity period	Unlimited

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### **1** Anonymization

Students have the implicit right to obtain information about the results of examinations that they complete. In addition, it is also reasonable and useful for students to have overall test results published, for example, all of the grades of an examination. An overview of all the grades permits an evaluation of one's own performance in relation to the other results.

The earlier widespread practice of posting a sheet listing the grades with the registration numbers of the respective students on the bulletin board within the corresponding department does not comply with data protection requirements. Using the registration number is not a sufficiently secure anonymization process, since it cannot be excluded that the associated name may be known. The invariant character of registration numbers makes it possible in principle to generate performance profiles over the entire course of a student's attendance.

A method for publishing the grade information conforming to data protection requirements simply provides how often (the number of times, or frequency) the respective grades or points have been achieved. An appropriate list might appear as in the following example:

Points	Frequency	Grade
100	2	1
93	7	1
82	14	2

If the personal grades for individual participants are to be communicated simultaneously with the publication of the overall examination results, the following anonymization method may be used, by issuing sequential numbers to students for each examination. This requires only a limited amount of extra effort for the examiner. The publication of the examination results as a combination of the sequential number and the grade increases the difficulty of tracing back to the persons affected to such a degree that this method may be regarded as compliant with data protection standards (regardless of whether in a list on a bulletin board or electronically as a file or Internet service). The examiner must of course prepare a list that documents the relationship between grade, sequential number, name, and registration number for each examination participant. This list is a confidential document, and may be viewed or processed only by the examiner and individuals privileged to manage examination results. In addition, any subsequent inquiries from students may be answered according to their sequential numbers on the basis of this (confidential) list. By generating new sequential numbers for each examination, it is is possible for a third party to generate a progressive or performance profile over the entire course of study.

Using this method (or in any comparable case), it must be considered whether it is possible to derive a personal reference from a combination of various data sources. If the same numbers that were used to the publish test results are (for example) also used again in a published list of participants names for apprenticeships, then the test results may be associated to the name of a particular person by using these two data sources.

It should also always be considered that for the publication of examination results, the number of examination participants should not be lower than a certain minimum number. The publication of individual grades should be avoided for fewer than approx. 10 participants.<sup>1)</sup>.

Recommendation:	<ul> <li>Only the number of times that a respective grade or points achieved should be published. Information about individual results should not be presented in a form accessible to the public.</li> <li>To simultaneously inform participants of their test results, the published data should consist of pairs composed from a list of sequential numbers (that is used only once) and the examination results (grades).</li> </ul>
Advantage:	Reliable and data-privacy compliant anonymization.
Disadvantage:	A minor amount of extra effort for the examiner.

## 2 Publication in Electronic Form

The following aspects should be considered in particular, if the examination results are published in electronic form (online):

### 2.1 Limitation of availability

As an additional security measure, the availability of the examination results should ideally be limited only to the individuals affected. At the very least, the availability of the published examination results must be restricted to the networks within Freie Universität Berlin. This limitation makes it impossible (for example) for various search machines to index such lists.

Even with this limitation, it is still possible for students and instructors to obtain worldwide access to examination results. Methods and tools for remote access are made available by Freie Universität Berlin for this purpose. For example, network-limited Web Services may be accessed worldwide via HTTP proxy servers. Using special access software (VPN, or virtual private network clients) that are provided by ZEDAT, a computer can be integrated into the Freie Universität's campus network virtually, independent of its physical network connection.

Recommendation:	Limit access to affected individuals.
Advantage:	Additional security; prevents access to examination results by search machines, for example.
Disadvantage:	Worldwide access only by use of appropriate techniques, such as http-proxy or VPN clients.

<sup>&</sup>lt;sup>1)</sup>This number is based on a specification of the Information Processing Regulation for Controlling Costs of Communication Connections (IVG § 5 Paragr. 4 Line 1, version dated 9-Oct-1992 (legal register page 305), last changed by Article III of the law dated 30-Jul-2001).

### 2.2 Using Central Services

In principle, central university services should be preferred, meaning services that are made available university-wide by Freie Universität's central IT service providers (ZEDAT, CeDiS, eAS, UB). These services are documented IT processes, which have been in part subjected to exhaustive verification procedures before implementation. The respective server systems are normally located within ZEDAT facilities created especially for these purposes, and are maintained by qualified personnel. In conjunction with the infrastructure provided (air conditioning, emergency power sources, fire prevention, periodic automated data backups, etc.), reliable operation of these services can be assumed. In most cases, other (non-central) departments do not possess the necessary resources to provide services of comparable quality. In addition, students vastly prefer a consistent visual appearance and a familiar user interface rather than many different separate systems.

Recommendation:	Use central services whenever possible.
Advantage:	(Significantly) better security.
Disadvantage:	Possible additional integration effort.

The Campus Management (CM) system is already used for the administration of examinations by many facilities of Freie Universität Berlin. Within CM, students may review their personal grades. The display of a summary of all grades for an examination is not yet possible. However, the CM export feature permits a corresponding list to be downloaded.<sup>2</sup>

Recommendation:	In the future, only CM should be used for the publication of examination results.
Advantage:	Uniform, standardized procedures.
Disadvantage:	Additional necessary features are still under development.

<sup>&</sup>lt;sup>2</sup> These lists may be downloaded as an Excel spreadsheet, for example (formatted for Microsoft's spreadsheet application). The instructor may process this list in accordance with the recommendations in section 1, and publish it electronically or as a paper bulletin.