



Information Sheet

Master Thesis (STA495), Master Exam (STA499) and Master Degree Completion

This information sheet describes the organizational and administrative procedures for the master thesis, master exam and master degree completion in biostatistics. For further questions please contact the scientific coordinator of the Master Program in Biostatistics via masterbiostat@math.uzh.ch. All the required forms can be found on <https://www.biostat.uzh.ch> under the menu point 'More information'.

1 Master Thesis

Goal	The master thesis is a substantial, independent research activity, which can, for example, be in the framework of an integrative project involving participants from other disciplines. The goal is that the candidates acquire detailed knowledge of the involved statistical methodology, apply it to a specific research question and/or extend it in some way to a different setting and show that they can describe and explain the findings in their own clear and concise words. A master thesis should be evidence of independent thought and research abilities.
Scope	For the successful completion of the master thesis requirements 30 credit points are awarded. It involves approximately a full-time 6 month workload.
Beginning	Students are allowed to start their master thesis after having passed all compulsory modules . Before starting officially each candidate has to find a supervisor(s) and agree with her or him on a subject. This may be through meetings or email exchange and subjects may vary between very narrowly defined projects to very widely formulated research problems. Depending on the supervisor(s) and the subject a written research plan/outline together with a time line may be fixed.
Registration	After agreeing on a subject the candidate has to register officially with the scientific coordinator using the form <i>Registration for the Master Thesis in Biostatistics</i> , which has to be signed by the candidate, all supervisors and the scientific coordinator. One of the professors directly involved in the Master Program in Biostatistics has to sign as responsible supervisor in case the actual supervisor is external to the program. Exceptions to this rule may in certain cases be allowed. Within the form the candidate and all supervisors agree on a date for the intermediate presentation (see below) and a submission date for the thesis. All parties commit to these dates with their signatures.

Work mode	<p>The work mode very much depends on the subject and on the supervisor(s). It is in any case recommended to plan regular meetings in order to discuss progress and questions. For the sake of efficiency and out of respect these meetings need to be thoroughly prepared by the candidate. Moreover, the master thesis should be the first more or less independent work in biostatistical research for the candidate and hence a considerable amount of autonomy is expected.</p>
Intermediate presentation	<p>At the discretion of the supervisor an intermediate presentation can be required. If applicable, the candidate will present the insights and results achieved approximately mid-way through the thesis work. Where possible presentations of several candidates will be bundled on the same date. In most cases an intermediate presentation will contain all or some of the following points:</p> <ul style="list-style-type: none">• Research question• Description of the data• Proposed methodology• Preliminary results• Discussion
Attendance of presentations	<p>Throughout the duration of the thesis work the candidate is obligated to attend all intermediate master thesis presentations and master exam presentations that are scheduled within the Master Program in Biostatistics. A calendar of scheduled presentations is sent by email through the msctbiostat Mailing-List.</p> <p>To make it easier to attend the presentations, they will take place - whenever possible - either on Mondays, 13:00 - 14:00, or on Thursdays, 15:00 - 16:00.</p>

Thesis report	<p>The main requirement for the master thesis is to produce a report - in English - describing all aspects that have been worked on. There is no single way of structuring a master thesis report in biostatistics but for many projects it may contain the following points.</p> <ul style="list-style-type: none"> • Introduction to research problem • Literature/methodological review/background • Data analysis/modeling/validation/simulation • Interpretation of results/conclusion • List of references • Appendix/code <p>It is strongly recommended to implement data analysis/modeling/simulation etc. in R and produce the report in <code>knitr</code> or <code>Sweave</code>.</p> <p>Overall, the structure of the report needs to be clear without repetitions, the language needs to be precise, consistent and concise, literature has to be cited correctly at the relevant locations and figures and tables have to be well-arranged and thought-through representing relevant facts featuring appropriate captions and references to them in the text.</p> <p>At the discretion of the supervisor it can be required that a first draft of the thesis report has to be submitted as early as approximately mid-way through the thesis work.</p>
Title page	<p>The title page of the report needs to contain the following information: module number and name, title of the thesis, name and matriculation number of the candidate, names of all supervisors (with titles and contact information if external), place and date of submission. A template report and a template title page can be obtained on www.biostat.uzh.ch under the menu point 'More information'.</p>
Plagiarism	<p>Content, structure and formulation of the thesis report have to be elaborated independently overall and in all parts and details. This means that quoting the accomplishments of a third party has to be clearly indicated as such in every instance where an idea, a structure, a formula, an approach or a formulation is adopted from a different source. This is independent of the form of publication of the source, printed or internet, and of the material being used only partially or in its entirety.</p> <p>It is not sufficient to only slightly modify/paraphrase an original text. Non-compliance implies the refusal of the thesis (i.e. the module is not passed) and can lead to disciplinary actions (§51 of the <i>Rahmenordnung</i>).</p> <p>If you use generative AI, please declare using the following sentences: Declaration During the preparation of this thesis, I used [NAME TOOLS and SERVICES] in order to [REASON]. After using this tool/service, I reviewed and edited the content as needed and I take full responsibility for the content of the report.</p> <p>If you do not use generative AI, please declare using the following sentence: Declaration During the preparation of this thesis, I did not use generative AI.</p>

Submission of thesis	Approximately four weeks before the agreed submission date the candidate and the (main) supervisor will receive a reminder by email. Approximately two to three weeks before the agreed end date a final draft has to be submitted to the supervisor(s), electronically or printed depending on the preference of the supervisor(s). On the end date a corrected, final report has to be submitted in printed form to each supervisor as well as one additional copy to the scientific coordinator of the program. No corrections of the report after the master exam will be allowed. Additional electronic submission depends on the candidate's and supervisors' choice on the form <i>Personal Declaration</i> which concerns plagiarism and electronic publication and has to be provided to the scientific coordinator at the same time.
Delayed submission	In justified and exceptional circumstances the agreed submission date of the thesis can be delayed. To this end a written request has to be submitted to the (main) supervisor and the scientific coordinator. Unjustified delays of submission may lead to failure of the module.
Grading	Usually the master thesis will be graded within four weeks of submission. The responsible supervisor is in charge of the grading process. Grading of the thesis is based on its content and form (see the point 'Thesis report' above) as well as on the candidate's work approach (independence, initiative, reliability in meetings, adoption of the time plan etc.). The given grade has to be justified in an expert's report written preferably by the (actual) supervisor. Once the grade has been transferred to the Institute of Mathematics it can be seen in the <i>Leistungsnachweis</i> . Grading is within the usual scale from 1 to 6 with quarter point steps, 6 being the best grade and 4 being the pass grade.
Archiving	The thesis will be archived in Library of the University of Zurich. It will be electronically archived and made available online provided the consent of all parties (see the form <i>Personal Declaration</i>).

2 Master Exam

Goal	The goal of the master exam is to present the findings of the master thesis, to demonstrate the mastering of its subject and its broader context to an expert audience consisting of the exam committee (responsible supervisor, preferably all other supervisors and at least one other member of the teaching staff of the program), other interested researchers and students (usually 30–45 minutes). After the presentation itself the candidate has to answer questions from the committee and the audience, demonstrating his or her general ability to discuss research questions, approaches and findings in an adequate way (approximately 15 minutes)
Scope	For the successful completion of the master exam 3 credit points are awarded.
Date	The master exam should take place not earlier than three to four weeks after the submission of the master thesis, although it is at the liberty of the supervisor to fix any suitable date in agreement with the candidate.
Registration	<p>The candidate has to register officially for the master exam with the scientific coordinator using the form <i>Registration for the Master Exam in Biostatistics</i>, which has to be signed by the candidate, the responsible supervisor, preferably all other supervisors and the scientific coordinator. Registration has to be completed approximately 2–3 weeks before the desired exam date.</p> <p>Approximately 1–2 weeks before the exam the candidate will receive a reminder by email for the master exam. It is possible to withdraw once from the exam, notice has to be given at the latest ten days before the agreed date. Further withdrawals can only be granted due to serious and provable circumstances (§40 of the <i>Rahmenordnung</i>).</p>
Presentation	<p>The contents and structure of the presentation very much depend on the specific project. In many cases it may contain the following points</p> <ul style="list-style-type: none"> • Introduction to research problem • Summary of methodology • Data analysis/modeling/validation/simulation • Interpretation of results/conclusion <p>Overall, the structure and the contents of the presentation have to be clear, comprehensible, relevant and complete. The presentation style (audibility, pace, adoption of time constraints etc.) has to be appropriate.</p>
Grading	The responsible supervisor is in charge of the final decision. Together with all other supervisors and another member of the teaching staff of the program he or she decides if the candidate passes or fails the exam, no grade is awarded.

3 Master Degree Completion

Once master thesis and exam as well as all other requirements of the Master Program in Biostatistics are successfully completed the master degree can be requested. The Faculty of Science has summarized all information on this step here:

<https://www.mnf.uzh.ch/en/studium/rund-ums-studium/studienabschluss.html>

The degree can only be issued after validation by the administrative staff and the academic committee of the Faculty of Science. Hence a non-negligible time span has to be expected between the submission of the form and the date of issue of the degree.