UNIVERSITY OF GOTHENBURG

DEPARTMENT OF CHEMISTRY AND MOLECULAR BIOLOGY

INDIVIDUAL STUDY PLAN IMPLEMENTATION

ANSWER TO QUERIES AND TIMELINES

Fig. 1 (Appendix I) provides an overview of our ISP implementation plan, divided into 9 sections.

1) New students and new supervisors

Every new student and new supervisor that joins the department receives an explanation of what the ISP is, its purpose and how to fill it out properly. This explanation is provided by the responsible for graduate studies together with the department´s administrator for graduate studies. This has been done systematically since fall semester of 2022 and we are continuing to improve on how the information about ISPs is communicated:

- In particular, every new student must attend a mandatory faculty course that includes a thorough introduction and explanation of what the ISP is. Attached are some of the slides used in that mandatory course (Appendix II). The slides explain how PhD students, supervisors, examiners and the head of department can use the ISP to keep track of progress, course activities, interactions among the student/supervisor/examiner, help build a CV for the PhD student and also explain the meaning of the different goals specified in the ISP.

- The Faculty of Natural Sciences is currently developing an “ISP booklet” that presents the purpose of the ISP and how it should be. The booklet will be distributed to our students from fall 2023. In its current preliminary form, this booklet consists of an introduction to the ISP (1-2 pages) explaining the responsibilities and rights of PhD students, supervisors and the host institution, explains why PhD students should be diligent about the ISPs, and explains why supervisors and examiners should also be diligent about the ISPs. This is accompanied with an Excel sheet where every “goal” section of the ISP is explained via four columns: 1) Degree objectives (pasted from ISP); 2) Instruction; 3) Authentic examples from existing ISPs; 4) How to write, which includes examples of sentences that students can complete, such as “I am developing … to interpret the role of physics …”

- In March 2023 our department created a Canvas site for PhD students that allows more direct communication. In particular, PhD students at KMB are now provided an example of an ISP as a PDF available on this Canvas site. Indeed, all information related to ISPs will be gathered within a specific folder, and complemented with a Discussion forum about the ISPs within Canvas.

2) Examiners

The faculty offers mandatory courses for all examiners in the Faculty of Natural Sciences. These yearly mandatory courses actively disseminate information about the purpose and uses of the ISPs. In 2022, the guest lecturer for this mandatory course was a legal expert who presented information about the legal aspects of the ISPs, and explained that it serves as a

contract between the involved parties. The faculty will continue to yearly provide updated education for examiners regarding the ISPs.

3-5) Student, supervisor and examiner
Students, supervisors and examiners must at least once a year update the ISP. Reminder emails are sent yearly and relentlessly until the ISP has been updated and established at least once a year. This helps ensure that the ISP is a living, actively updated instrument for planning, monitoring, issue-resolving, and providing feedback. This yearly cycle has been in place since the creation of the ISP system at GU.

6) Quality control
Since Jan 2023, special emphasis on quality control has been implemented. Each ISP is critically evaluated by the responsible for graduate studies and relevant feedback provided as comments to the co-authors to ensure that the ISP lives up to the expected standards and fulfills its intended purpose.

7) Establishment
Once satisfyingly updated, an updated establishment of each ISP is ultimately made by the responsible for graduate studies in our department, to whom this task has been delegated by the head of department.

8) Examiner meeting
The ISP serves as an important basis for the yearly meeting with the examiner. It constitutes an agreement of what has been and will be done, as well as serves as an assessment of supervision, student progress and reflection. Since Jan 2023, a suggestion of questions to guide the yearly examiner meeting has been provided to examiners. These are:

Yearly Examiner Meeting - Suggestions for Topics
1. How have you progressed since last we met, let's have a look at your ISP
2. What has been achieved both with respect to the goals, and to your project.
3. What do you need to do next in terms of a) courses/activities, b) your project, and how is it connected to the goals?
4. How about publications? Discuss.
5. Have you reflected on your long-term career? Discuss.
6. How is the work environment and relationship with your supervisor? Discuss
(Students can also approach Johanna Johansson-Sjölander or Marc Pilon in such matters).
7. Anything else you would like to bring up?

9) Canvas site for PhD students
As mentioned above, the KMB department has now created a Canvas site that facilitates dissemination of information to PhD students, including information about the ISP.

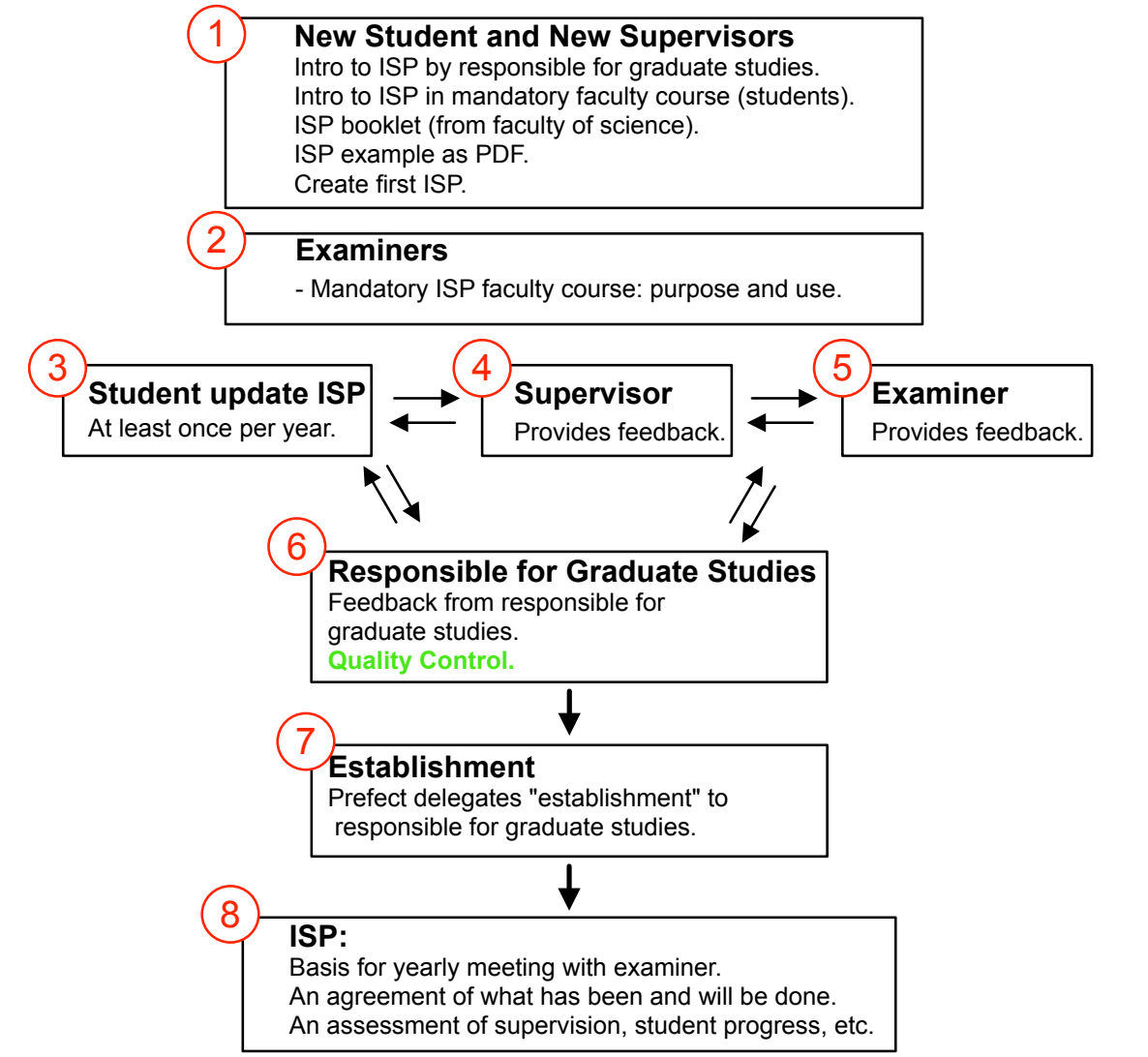
Yearly supervisors and yearly PhD student meetings
In addition to above, the responsible for graduate studies in our department organizes once a year meeting with supervisors and PhD students to discuss the year´s issues, including giving and receiving feedback on the ISPs and their implementation. This began in fall 2022.

SUMMARY

To summarize, the department is actively working at multiple levels to ensure that the ISPs are used to their fullest, with separate aspects proceeding with different timelines. Supervisors, examiners and students are educated in courses about the purpose and use of the ISPs. An ISP booklet is in development at Faculty level. A Canvas site has been created to efficiently communicate ISP-related information to PhD students. The responsible for graduate studies organizes yearly meetings with PhD students and supervisors, and examiners are tasked with discussing the ISP at each yearly meeting they have with their assigned PhD students.

APPENDIX I: FIGURE 1

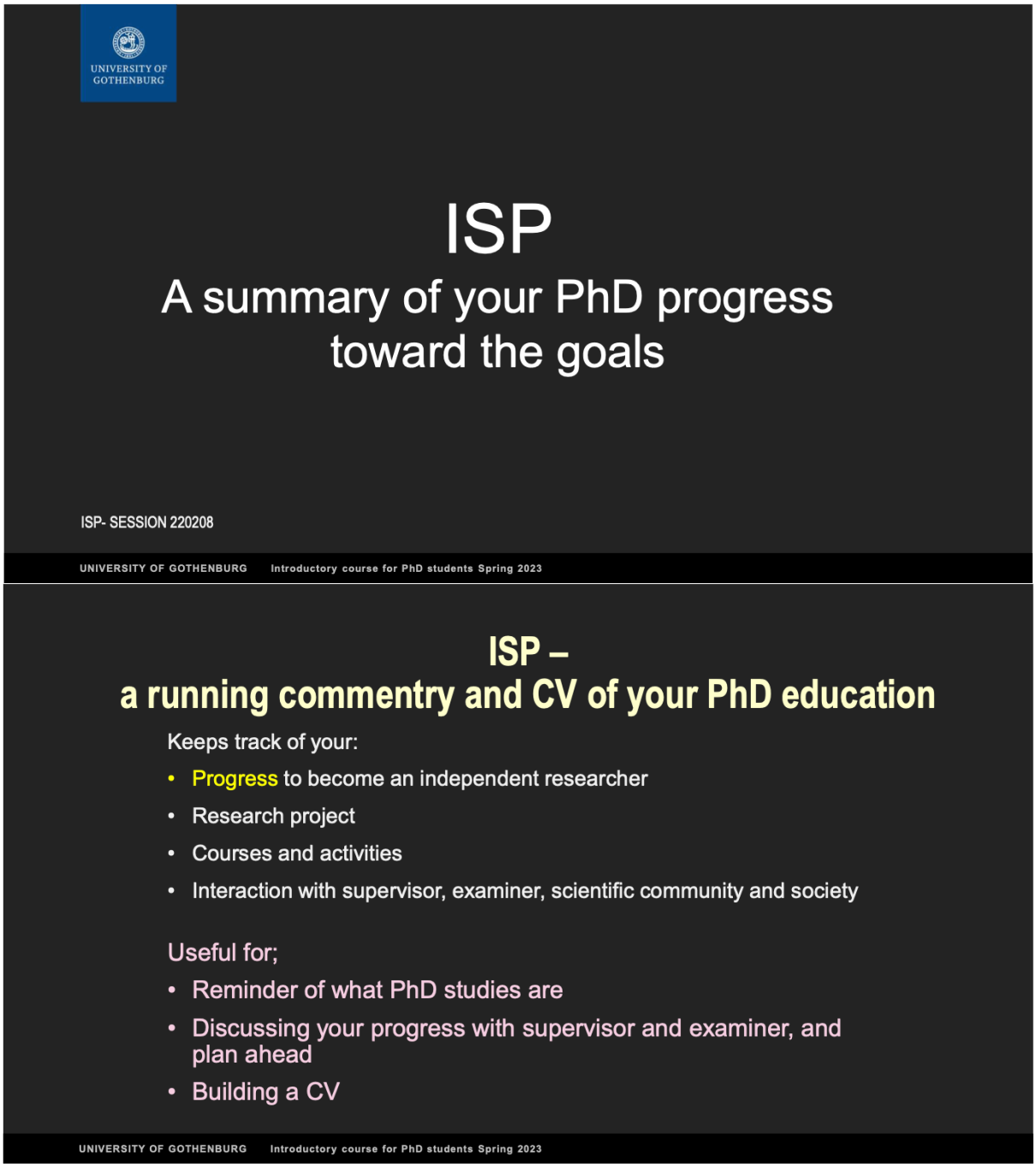
FIG. 1. Individual Study Plan (ISP): Implementation Strategy for Physical Chemistry, GU



Timeline

1 Intro by responsible for graduate studies and PDF is implemented from Jan 2023. Faculty course since 2018. Booklet in development. 2 Annual mandatory faculty courses for examiners began in 2019. 3 4 5 Already done once a year. 6 Stricter role of responsible for graduate studies began Jan 2023. 7 Established procedure for many years now. 8 Stricter implementation of examiner yearly meetings began Fall 2022. 9 A CANVAS site created March 2023 to facilitate communication between responsible for graduate studies and PhD students.	Once per year, the responsible for graduate studies hosts separate meetings with graduate students and examiners to discuss ISP implementation. Began Fall 2022.

APPENDIX II: SLIDES FROM ISP FACULTY COURSE



How supervisors, examiners and HoDs can use the ISP

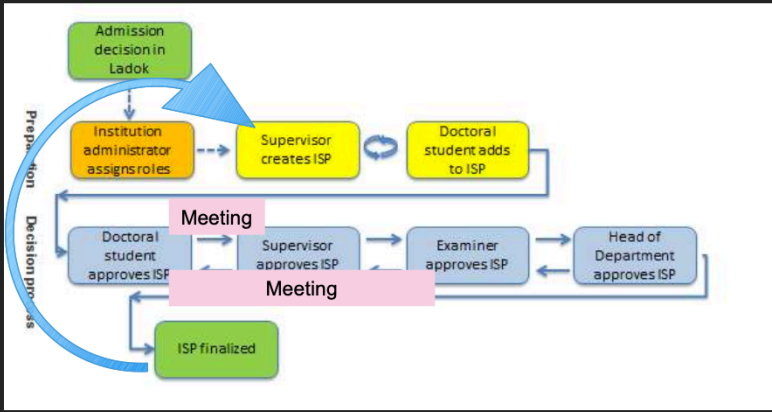
Supervisor:

To check that the two of you are on the same page, be reminded of want else needs to be done, confirm progress together with you, the examiner and HoD.

Examiner: A side-line judgement on progress for feed-back to PhD student, supervisor, and HoD.

HoD: Confirmation that everything is OK, or made aware of that he/she might need to take some action. Can give feed-back to the examiner, supervisor and PhD.

The yearly ISP-process



https://medarbetarportalen.gu.se/doktorand/dina-studier/studieadministrativa-system/isp/anvandarhandledning/?languageId=100001

Structure of the Individual Study Plan (ISP)

1. Basic Information
2. General Information
3. Rate of study and Student finance
4. Courses and conferences
5. Supervision and examination
6. Thesis
7. Meetings
8. Comments
9. Approvals
10. Degree objectives
11. Attachments

https://isp.gu.se/isp/studyplan/studyPlan?i=29058

Group discussions

- Groups of 4 or 5
- Section 10 – Degree objectives:

  Identify **how/what** different activies (research, courses, conferences.., etc) can contribute to fulfilling the objectives, and be useful in the future in or outside academia.

www.menti.com
17 51 158

13.55 -14.15 – Summary of identified ”hows and whats” – be prepared to explain ☺
14.15 - 14.30 Break
14.30 – How to supervise your supervisor

The Goals – definition of a scientist

For the Degree of PhD the third-cycle student shall:

1.1 Knowledge and understanding
a) demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field, and
b) demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular.

1.2 Competence and skills
c) demonstrate the capacity for scholarly analysis and synthesis as well as to review and assess new and complex phenomena, issues and situations autonomously and critically
d) demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work
e) demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research
f) demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general
g) demonstrate the ability to identify the need for further knowledge and
h) demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.

1.3 Judgement and approach
i) demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics, and
j) demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.