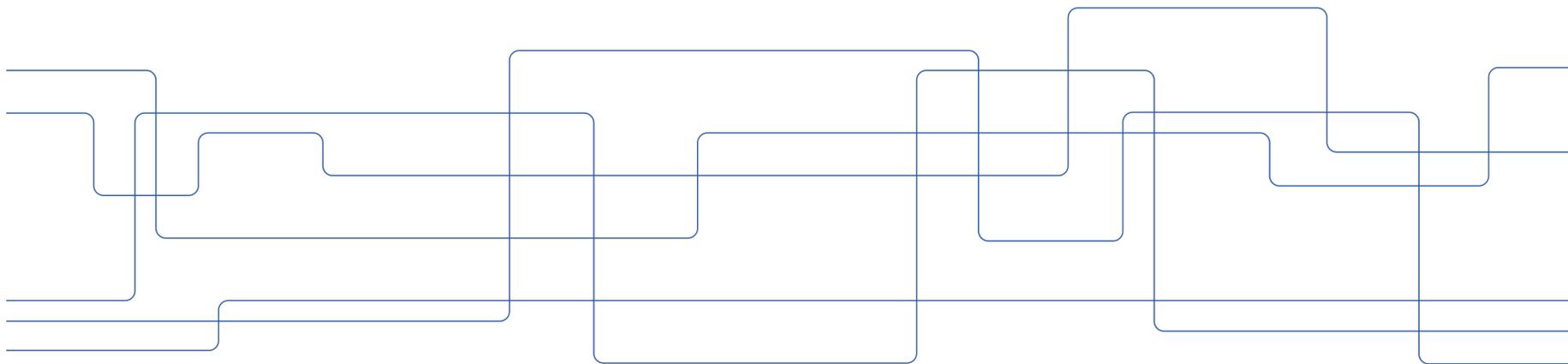




Update of general study syllabus in Physics





Specializations

- Current:
 - Atomic, subatomic and astrophysics
 - Theoretical physics
 - Material and nano physics
 - Optics and photonics
 - Biological and biomedical physics
 - Nuclear engineering
- Three options
 - Six specialisations based on division names
 - > Easy to identify/remember, but all students may not fit
 - No specialisations
 - > Less subdivision and nothing to remember, but all students/divisions may not feel comfortable with just "Physics"
 - Something in between
 - > Is there a sweet spot?



Compulsory course

- Current: 7.5 credits, FSH3000 Width and Ethics in Physics
- There is a central requirement to also explicitly examine sustainability and equal treatment aspects (JML) in the programs
- Suggested change discussed in program council and with Applied Physics PA:
 - The course is expanded to 9 credits
 - New course module on JML
 - New course name (suggested: Fysiken, doktoranden och samhället)
 - JML module needs to be arranged, but external courses can also be credited



Conditionally elective courses

- Background: A central encouragement to make the programs more like programs on all levels
 - Apart from the compulsory course, PhD students can effectively choose any course at the moment
- Introduction of 7.5 credits of conditionally elective courses
 - List of courses from which at least 7.5 credits must be included
 - Ideally courses that are identified as central to larger groups of students within the program
 - Should be on offer regularly
 - Ideally these courses should have economic support



Suggested conditionally elective courses

- FSH3001 Kärnkraftsäkerhet, projektkurs
- FSH3220 * Medicinsk avbildning, signaler och system
- FSH3301 * Experimentell kärnfysik
- FSH3311 * Teoretisk kärnfysik
- FSH3312 Symmetrier i fysikaliska system
- **FSH3371 *** **Speciell relativitetsteori**
- **FSH3401** **Kondenserade materiens fysik, avancerad kurs**
- FSH3773 * Kärnkraftsäkerhet
- **FSH3901** **Statistiska metoder i fysik**

* = Course is given along with advanced level course

RED = Course is under development



Compilation thesis vs monograph

- Background: Other programs have in essence made monographs obsolete
 - Done by requiring several additional checks on monographs
- Monographs are important to some of our divisions
- Discussion points:
 - What should be required from a compilation thesis?
 - > I.e., number of papers etc
 - What should be required from a monograph?
 - > Additional checks apart from dissertation?



Activities for aim fulfillment

- This part should largely be considered as support for the construction of the individual study plans
 - Many formulations are “Målet **kan** uppnås genom ...”
- A couple of musts are included and are therefore compulsory:
 - Thesis and thesis defense
 - Compulsory orientation course (we already discussed this)



Course accreditation

- Current praxis
 - A student may get credited for courses from the Master if they are not formally necessary for the student to be eligible for PhD studies
 - Note: To be formally eligible, a student needs to either
 - > Have a Master's degree or
 - > Have at least 240 credits out of which at least 60 credits are at Advanced level or
 - > Have the equivalent knowledge
 - Reason for praxis: Most students have Master's degrees of 300 credits. Having taken out the Master's degree should not affect the student's possibility of getting courses accredited.
- Note: Accredited courses formally decrease the total study time



Program description: Organisation

- Program council
 - PA (1)
 - Division representatives (6)
 - Student representatives (2)
- Student council
 - Run by students
- PA runs the day-to-day of the program organisation



Course financing

- There is currently *no* financing for courses on PhD level with some exceptions
 - Some running costs and development costs can be applied for from the School
 - Courses co-taught with courses at Advanced level
- Effectively the division of any teacher pays for the courses, typically from FOFU
 - This may be fine for division specific courses
 - Not fine for courses of interest to larger audiences (program compulsory course, conditionally elective courses, etc)
- Other effects
 - Paid courses at other departments (e.g., pedagogy courses) need to be paid by the divisions