**Instructions for filling in individual learning outcomes prior to admission to doctoral**

**studies/**

 **Instructions for filling in goal achievement at the annual follow-ups of your individual study plan**

Like all doctoral students in Sweden, you must meet the national outcomes (goals) during your doctoral studies. You will not meet some of the outcomes until you defend your thesis. To meet the national outcomes, you and your supervisor must, prior to your admission to doctoral studies, articulate individual learning outcomes and identify the activities you will be engaging in to reach them. Your individual outcomes and activities are tools to help you meet the national outcomes. **Specify your individual outcomes and activities in the matrix in Section 2.** Your matrix for goal achievement will accompany you throughout your doctoral studies until you defend your thesis.

When filling in the individual outcomes, proceed from the same headings as in the national outcomes: ***”Knowledge and understanding”, ”Competence and skills”, and ”Judgement and approach***.” You must have at least one individual learning outcome under each heading. Enter the activities that you, your supervisor and your examiner have agreed on. The individual learning outcomes and activities are to proceed from your doctoral project: What does the project contain, which specific methods do you need to be better acquainted with, what knowledge do you need to build on, what literature do you need to become more familiar with, what seminar series and conferences do you plan to take part in, will you be spending time in another research unit during your doctoral period, etc.? *Keep in mind that you are to follow up your individual learning outcomes on an annual basis and revise them if needed.*

The enclosure to the matrix offers examples of individual learning outcomes for three doctoral students at the faculty. Take these examples as a way of thinking and proceed from the specifics of your project to devise your own individual learning outcomes.

**Do not fill in Section 1 before you are admitted – fill it in at your annual follow-ups,** including the 50% seminar (“mittseminarium) and prior to defending your thesis. The idea is for you to consult with your reference group at the annual follow-ups and to boldface the appropriate digit from 0 to 4 as a reflection of how far you have got in achieving the national outcomes.

If you are not pursuing full-time doctoral studies, i.e. so that you have more follow-ups than the four regular ones, add extra rows to the matrix to indicate the progress that you have made each year. Do the same if you and your
supervisor would like to do follow-ups more often than once a year.

Your department will file your matrix along with the forms for follow-up and the 50% seminar. After your 50%
seminar, a copy of the matrix and a copy of the certificate of the completed seminar are to be sent to the Dean’s office.

Make sure to enclose a copy of the matrix when you send in your application to defend your thesis as well. Keep in mind that some national outcomes are not examined before you defend your thesis. Thus, not all outcomes will be at level 4 when you apply for defence of your thesis. The examining committee is responsible for reviewing and examining your thesis and defence. The national outcomes are to form the basis of this assessment.

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| Name of the doctoral student      | Swedish social security no.      |

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| Date of review of goal achievement      |

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**Section 1:
Do not fill in before you are admitted. Keep in mind: Fill in at the annual follow-ups.**

**ACTIVITIES FOR THE PURPOSE OF REACHING THE NATIONAL AND THE FACULTY’S OUTCOMES**

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| **NATIONAL OUTCOMES (1-12**) | **ACTIVITIES** (relevant to the outcome) | **Progress towards goal achievement**0=not planned1=somewhat achieved/planned2=halfway achieved3=almost achieved 4=achieved | **REMARKS** |
| **Knowledge and understanding** |
| ***Outcome 1:*** *Demonstrate broad knowledge and systematic understanding of the research field* | Literature courseSeminars+journal club50% seminar     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| ***Outcome 2:*** *Demonstrate advanced and up-to-date specialised knowledge in a limited area of the research field* | Literature courseLaboratory experiment courseGood Clinical Practice courseData collection/Laboratory work Research visit at another universityClinical research 50% seminar     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| **NATIONAL OUTCOMES (1-12**) | **ACTIVITIES** (relevant to the outcome) | **Progress towards goal achievement** 0=not planned1=somewhat achieved/planned2=halfway achieved 3=almost achieved4=achieved | **REMARKS** |
| ***Outcome 3:*** *Demonstrate familiarity with the research methodology in general*  | Mandatory course in research methodology and philosophy of science      |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| ***Outcome 4:*** *Demonstrate familiarity with the methods of the specific field of research in* *particular* | Course in statistics and methodologyPresentation at conferences50% seminar     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
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| Year 4: |  0 1 2 3 4 |       |

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| **Competence and skills** |
| ***Outcome 5:*** *Demonstrate the capacity for scholarly analysis and synthesis as well to review and assess new and complex phenomena, issues and situations* *autonomously and critically* | Seminars+journal clubAnnual follow-up50% seminar     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| **NATIONAL OUTCOMES (1-12**) | **ACTIVITIES** (relevant to the outcome) | **Progress towards goal achievement** 0=not planned1=somewhat achieved/planned2=halfway achieved 3=almost achieved4=achieved | **REMARKS** |
| ***Outcome 6:*** *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* | Seminars+journal clubCourse in academic writingData collection/Laboratory workCourse in writing research applications 50% seminarClinical research      Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| ***Outcome 7:*** *Demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research* |      Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| ***Outcome 8:*** *Demonstrate the ability in both national and international contexts to present and discuss research and research findings* *authoritatively in speech and in writing and in dialogue with the academic community and society in general* | Seminars Required presentation at conferencesResearch visit at another university 50% seminar     Thesis and defence |

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| Half-time: |  0 1 2 3 4 |       |
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| **NATIONAL OUTCOMES (1-12**) | **ACTIVITIES** (relevant to the outcome) | **Progress towards goal achievement**0=not planned1=somewhat achieved/planned2=halfway achieved 3=almost achieved 4=achieved | **REMARKS** |
| ***Outcome 9:*** *Demonstrate the ability to identify the need for further knowledge*  | Data collection/Laboratory workAnnual follow-upCourse in academic writingCourse in writing research applicationsLiterature course50% seminar      |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| ***Outcome 10:*** *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* | Compose popular science materials and press releasesFirst and second-cycle instructionTraining in higher education teaching     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| **Judgement and approach** |
| ***Outcome 11:*** *Demonstrate intellectual* *autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics*  | Mandatory course in ethicsLaboratory experiment courseGood Clinical Practice course Clinical research     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| **NATIONAL OUTCOMES (1-12**) | **ACTIVITIES** (relevant to the outcome) | **Progress towards goal achievement**0=not planned1=somewhat achieved/planned2=halfway achieved 3=almost achieved 4=achieved | **REMARKS** |
| ***Outcome 12:*** *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* | Laboratory experiment courseGood Clinical Practice courseData collection/Laboratory workResearch visit at another universityClinical research50% seminar     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
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| **FACULTY OF MEDICINE’S OUTCOMES (13-15)** | **ACTIVITIES** (relevant to the outcome) | **Progress towards goal achievement**0=not planned1=somewhat achieved/planned2=halfway achieved 3=almost achieved 4=achieved | **REMARKS** |
| **Outcome 13:** *Demonstrate broad knowledge in the field of general scientific theory and in the field of medical science in particular* | Mandatory course in research methodology and philosophy of science50% seminarResearch visit at another university      |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
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| Year 4: |  0 1 2 3 4 |       |

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| **Outcome 14:** *Demonstrate a good ability to relate the student’s own research to other current medical research and by extension to clinical application and other social benefit* | Mandatory course in research methodology and philosophy of scienceData collection/Laboratory workClinical research50% seminar     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
| Year 3: |  0 1 2 3 4 |       |
| Year 4: |  0 1 2 3 4 |       |

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| **Target 15:** *Demonstrate a good ability to relate to the complexity of medical research, its ethical aspects and its impact on individuals and society* | Seminars+Journal clubMandatory course in ethicsLaboratory experiment courseClinical research     Thesis and defence |

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| Year 1: |  0 1 2 3 4 |       |
| Half-time: |  0 1 2 3 4 |       |
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| Year 4: |  0 1 2 3 4 |       |

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**Section 2:**

**Individual learning outcomes are to be filled in prior to admission. The outcomes may be revised at the annual follow-ups.**

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| **INDIVIDUAL LEARNING OUTCOMES** | **ACTIVITIES** | **REMARKS** |
| **KNOWLEDGE AND UNDERSTANDING** |  |
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| **INDIVIDUAL LEARNING OUTCOMES** | **ACTIVITIES** | **REMARKS** |
| **COMPETENCE AND SKILLS** |
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| **INDIVIDUAL LEARNING OUTCOMES** | **ACTIVITIES** | **REMARKS** |
| **JUDGEMENT AND APPROACH** |
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