UPPSALA UNIVERSITET

# Mall för kursplan/Template for course syllabus

Kurs på forskarnivå/Third-cycle (doctoral) course
Vetenskapsområdet för medicin och farmaci/
Disciplinary Domain of Medicine and Pharmacy

Mall fastställd av KUF/template approved by KUF 2022-12-13

Kursplanen ska finnas på både svenska och engelska, ingen rubrik får tas bort och samtliga måste fyllas i. Kursplanen fastställs sedan formellt av KUF och utgör därefter underlag för information i kursdatabasen samt till rapportering i LADOK.

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| **Kurskod:** | FMF0114 |
| **Kurstitel:** | Utveckling och anpassning av komplexa hälso- och sjukvårdsinterventioner |
| **Kurspoäng:** | 7,5 |
| **Nivå:** | Utbildning på forskarnivå (third-cycle education) |
| **Kursansvarig:** | Joanne Woodford |
| **Ansvarig institution:** | Institutionen för kvinnors och barns hälsa |
| **Undervisningsspråk:** | Engelska |
| **Forskningsspår:** | Ingår inte i ett forskningsspår |
| **Beskrivning av kursinnehåll:** | Det övergripande målet med kursen är att skapa en grundläggande förståelse för hur man utvecklar och/eller anpassar komplexa hälso- och sjukvårdsinterventioner i enlighet med Storbritanniens Medical Research Council's (MRC) Complex Interventions Framework. Kursen är särskilt lämpad för dem som vill utveckla och/eller anpassa komplexa hälso- och sjukvårdsinterventioner som är optimerade för implementering i verkliga vårdmiljöer. Kursen kommer också att fokusera på användningen av 'participatory approaches', såsom 'public contribution' och samskapande.<br><br>Kursen är utformad kring de centrala åtgärder som bör beaktas vid utveckling och/eller anpassning av en komplex hälso- och sjukvårdsintervention (O'Cathain et al., 2019), inklusive: (1) planering av utvecklingsprocessen, (2) involvering av intressenter, (3) evidenssyntes, (4) användning av teorier och formulering av programteori och 'logic models', (5) insamling av kvalitativa och kvantitativa data, (6) förståelse för kontexten, samt (7) beakta och ta hänsyn till framtida implementering.<br><br>Kursen kommer att ge studenterna en verktyg för att underlätta tillämpningen av den kunskap de har fått i sin forskning. |
| **Undervisningsformer:** | Kursen består av en serie föreläsningar och seminarier. Seminarierna kommer att främja aktivitetsbaserat lärande, såsom diskussioner, fallstudier, debatter, 'peer review', rollspel och simulerade datainsamlingsövningar. De interaktiva seminarierna är utformade för att hjälpa studenterna att tillämpa den kunskap de har fått under kursen i sin egen forskning. |
| **Lärandemål:** | Efter genomgången kurs ska studenterna kunna: |

- Definiera vad en komplex hälso- och sjukvårdsintervention är.
- Förstå de centrala åtgärderna vid utveckling och/eller anpassning av interventioner enligt 'MRC Complex Interventions Framework'.
- Identifiera och tillämpa lämpliga strategier för att meningsfullt involvera intressenter, inklusive allmänheten, i interventionsutveckling.
- Förstå hur man genomför en evidenssyntes för att informera utvecklingen och/eller anpassningen av en intervention.
- Använda relevanta teorier och ramverk för att formulera interventionens programteori och 'logic model'.
- Utforma lämpliga kvantitativa, kvalitativa och mixade metoder-studier för att informera utvecklingen och/eller anpassningen av en intervention.
- Planera hur data ska samlas in för att förstå den kontext där interventionen ska användas och hur den kan anpassas till andra kontexter.
- Identifiera och tillämpa metoder för att optimera en interventions framtida implementeringspotential.

**Examinator:** Joanne Woodford

**Obligatoriska moment:** Deltagande är obligatoriskt. Maximalt ett (1) seminarium får missas, dock kommer detta att ersättas med skrivuppgifter.

**Examinationsform:** Seminariedeltagande, posterpresentation, examinationsuppgift, och presentation av denna.

**Kurslitteratur:** Kurslitteraturen som listas nedan kan komma att ändras då den kommer att uppdateras, där så är lämpligt, med mer aktuella resurser innan kursen genomförs.

Tillfälle 1: Introduktion till MRC Complex Interventions Framework

Tillfälle 2: Planera utvecklingsprocessen för interventioner

Obligatorisk läsning

O'Cathain, A., Croot, L., Duncan, E., Rousseau, N., Sworn, K., Turner, K. M., Yardley, L., & Hoddinott, P. (2019). Guidance on how to develop complex interventions to improve health and healthcare. *BMJ Open, 9*(8), e029954.

O'Cathain, A., Croot, L., Sworn, K., Duncan, E., Rousseau, N., Turner, K., Yardley, L., & Hoddinott, P. (2019). Taxonomy of approaches to developing interventions to improve health: a systematic methods overview. *Pilot and Feasibility Studies, 5*, 41.

Skivington, K., Matthews, L., Simpson, S. A., Craig, P., Baird, J., Blazeby, J. M., Boyd, K. A., Craig, N., French, D. P., McIntosh, E., Petticrew, M., Rycroft-Malone, J., White, M., & Moore, L. (2021). A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. *BMJ, 374*, n2061.

Rekommenderad läsning

Bleijenberg, N., de Man-van Ginkel, J. M., Trappenburg, J. C. A., Ettema, R. G. A., Sino, C. G., Heim, N., Hafsteindóttir, T. B., Richards, D. A., & Schuurmans, M. J. (2018). Increasing value and reducing waste by optimizing the development of complex interventions: enriching the development phase of the Medical Research Council (MRC) Framework. *International Journal of Nursing Studies, 79*, 86–93.

Skivington, K., Matthews, L., Simpson, S. A., Craig, P., Baird, J., Blazeby, J. M., Boyd, K. A., Craig, N., French, D. P., McIntosh, E., Petticrew, M., Rycroft-Malone, J., White, M., & Moore, L. (2021). Framework for the development and evaluation of complex interventions: gap analysis, workshop and consultation-informed update. *Health Technology Assessment, 25*(57), 1–132.

Tillfälle 3: ’Participatory approaches’ för utveckling och anpassning av interventioner

Obligatorisk läsning

Gaber, S. N., Guerrero, M., & Rosenberg, L. (2023). Characteristics and consequences of participatory research approaches in long-term care facilities for older adults: a meta-ethnography of qualitative studies. *Lancet, 402*(Suppl 1), S43

Hoddinott, P., Pollock, A., O'Cathain, A., Boyer, I., Taylor, J., MacDonald, C., Oliver, S., & Donovan, J. L. (2018). How to incorporate patient and public perspectives into the design and conduct of research. *F1000Research, 7*, 752.

Tobiano, G., Gillespie, B. M., Carlini, J., Muir, R., Rasiah, J., Wan, C. S., McCarron, T. L., Moffat, K., Jahandideh, S., & Chaboyer, W. (2024). Establishing patient partners' roles on research teams: a scoping review. *Research Involvement and Engagement*, *10*(1), 129.

Rekommenderad läsning

Grindell, C., Coates, E., Croot, L., & O'Cathain, A. (2022). The use of co-production, co-design and co-creation to mobilise knowledge in the management of health conditions: a systematic review. *BMC Health Services Research, 22*(1), 877.

Messiha, K., Chinapaw, M. J. M., Ket, H. C. F. F., An, Q., Anand-Kumar, V., Longworth, G. R., Chastin, S., & Altenburg, T. M. (2023). Systematic review of contemporary theories used for co-creation, co-design and co-production in Public Health. *Journal of Public Health, 45*(3), 723–737.

Rousseau, N., Turner, K. M., Duncan, E., O'Cathain, A., Croot, L., Yardley, L., & Hoddinott, P. (2019). Attending to design when developing complex health interventions: a qualitative interview study with intervention developers and associated stakeholders. *PloS One, 14*(10), e0223615.

Vargas, C., Whelan, J., Brimblecombe, J., & Allender, S. (2022). Co-creation, co-design, co-production for public health - a perspective on definition and distinctions. *Public Health Research and Practice, 32*(2), 3222211.

Tillfälle 4: Introduktion till evidenssyntes

Tillfälle 5: Använda evidenssyntes vid utveckling och anpassning av interventioner

Obligatorisk läsning

Khalil, H., & Tricco, A. C. (2022). Differentiating between mapping reviews and scoping reviews in the evidence synthesis ecosystem. *Journal of Clinical Epidemiology*, *149*, 175–182.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., … Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, *372*, n71.

Munn, Z., Pollock, D., Barker, T. H., Stone, J., Stern, C., Aromataris, E., Schünemann, H. J., Clyne, B., Khalil, H., Mustafa, R. A., Godfrey, C., Booth, A., Tricco, A. C., & Pearson, A. (2023). The Pandora's Box of Evidence Synthesis and the case for a living Evidence Synthesis Taxonomy. *BMJ Evidence-Based Medicine*, *28*(3), 148–150.

Rekommenderad läsning

Clarke, M., & Chalmers, I. (2018). Reflections on the history of systematic reviews. *BMJ Evidence-Based Medicine*, *23*(4), 121–122.

Coumoundouros, C., Mårtensson, E., Ferraris, G., Zuidberg, J. M., von Essen, L., Sanderman, R., & Woodford, J. (2022). Implementation of e-mental health interventions for informal caregivers of adults with chronic diseases: mixed methods systematic review with a qualitative comparative analysis and thematic synthesis. *JMIR Mental Health*, *9*(11), e41891.

Levitt H. M. (2024). How to conduct an integrative mixed methods meta-analysis: a tutorial for the systematic review of quantitative and qualitative evidence. *Psychological Methods*, *10*, 1037/met0000675.

Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ, 372, n71.

Noyes, J., Booth, A., Moore, G., Flemming, K., Tunçalp, Ö., & Shakibazadeh, E. (2019). Synthesising quantitative and qualitative evidence to inform guidelines on complex interventions: clarifying the purposes, designs and outlining some methods. *BMJ Global Health*, *4*(Suppl 1), e000893.

Tillfälle 6: Hur man utvecklar en programteori och ’logic model’

Obligatorisk läsning

Duncan, E., O'Cathain, A., Rousseau, N., Croot, L., Sworn, K., Turner, K. M., Yardley, L., & Hoddinott, P. (2020). Guidance for reporting intervention development studies in health research (GUIDED): an evidence-based consensus study. *BMJ Open*, *10*(4), e033516.

Hoffmann, T. C., Glasziou, P. P., Boutron, I., Milne, R., Perera, R., Moher, D., Altman, D. G., Barbour, V., Macdonald, H., Johnston, M., Lamb, S. E., Dixon-Woods, M., McCulloch, P., Wyatt, J. C., Chan, A. W., & Michie, S. (2014). Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide. *BMJ*, *348*, g1687.

Mills, T., Lawton, R., & Sheard, L. (2019). Advancing complexity science in healthcare research: the logic of logic models. *BMC Medical Research Methodology*, *19*(1), 55.

Rekommenderad läsning

De Silva, M. J., Breuer, E., Lee, L., Asher, L., Chowdhary, N., Lund, C., & Patel, V. (2014). Theory of Change: a theory-driven approach to enhance the Medical Research Council's framework for complex interventions. Trials, 15, 267.

Kelly, M., Steed, L., Sohanpal, R., Pinnock, H., Barradell, A., Dibao-Dina, C., Mammoliti, K. M., Wileman, V., Rowland, V., Newton, S., Moore, A., & Taylor, S. (2021). The TANDEM trial: protocol for the process evaluation of a randomised trial of a complex intervention for anxiety and/or depression in people living with chronic obstructive pulmonary disease (COPD). *Trials, 22*(1), 495.

Moore, G. F., Audrey, S., Barker, M., Bond, L., Bonell, C., Hardeman, W., Moore, L., O'Cathain, A., Tinati, T., Wight, D., & Baird, J. (2015). Process evaluation of complex interventions: Medical Research Council guidance. BMJ, 350, h1258.

Moore, G. F., & Evans, R. E. (2017). What theory, for whom and in which context? Reflections on the application of theory in the development and evaluation of complex population health interventions. SSM - population health, 3, 132–135.

Turner, R. R., Arden, M. A., Reale, S., Sutton, E., Taylor, S. J. C., Bourke, L., Greenfield, D. M., Morrissey, D., Brown, J., Doherty, P., Rosario, D. J., & Steed, L. (2021). The development of a theory and evidence-based intervention to aid implementation of exercise into the prostate cancer care pathway with a focus on healthcare professional behaviour, the STAMINA trial. *BMC Health Services Research, 21*(1), 273.

Tillfälle 7: Introduktion till olika forskningsdesigner för att informera utveckling och anpassning av interventioner

Obligatorisk läsning

Blomberg, O., Svedin, F., Farrand, P., Brantnell, A., von Essen, L., Patriksson Karlsson, J., Åberg, A. C., & Woodford, J. (2024). Adaptation of a guided low-intensity behavioral activation intervention for people with dementia in Sweden: a qualitative study exploring the needs and preferences of key stakeholders. *BMC Geriatrics, 24*(1), 113

Terris-Prestholt, F., Neke, N., Grund, J. M., Plotkin, M., Kuringe, E., Osaki, H., Ong, J. J., Tucker, J. D., Mshana, G., Mahler, H., Weiss, H. A., Wambura, M., & VMMC study team (2019). Using discrete choice experiments to inform the design of complex interventions. *Trials, 20*(1), 157.

Turner, K. M., Percival, J., Kessler, D., & Donovan, J. L. (2019). Synthesizing qualitative data sets to improve the design of trials and complex health interventions: a worked example. *Qualitative Health Research, 29*(5), 693–699.

Rekommenderad läsning

Allan, S., Sinclair, F., Correia, M., Fragkandrea-Nixon, I., Phiri, A., Jones, G., Thomson, D., Yanga, F., Brown, G., McCann, M., Simpson, S. A., Evans, J., Robb, K., & Gumley, A. (2024). Co-designing a low-intensity psychological therapy for fear of recurrence in psychosis using translational learning from fear of recurrence in oncology: protocol for intervention development for future testing in a feasibility study. *BMJ Open, 14*(12), e090566.

Rousseau, N., Turner, K. M., Duncan, E., O'Cathain, A., Croot, L., Yardley, L., & Hoddinott, P. (2019). Attending to design when developing complex health interventions: a qualitative interview study with intervention developers and associated stakeholders. PloS One, 14(10), e0223615.

Sugg, H. V. R., Richards, D. A., & Frost, J. (2017). Optimising the acceptability and feasibility of novel complex interventions: an iterative, person-based approach to developing the UK Morita therapy outpatient protocol. *Pilot and Feasibility Studies, 3*, 37.

Tillfälle 8: Användning av integrerade mixade metoder för att informera utveckling och anpassning av interventioner

Obligatorisk läsning

Davis, K., Minckas, N., Bond, V., Clark, C. J., Colbourn, T., Drabble, S. J., Hesketh, T., Hill, Z., Morrison, J., Mweemba, O., Osrin, D., Prost, A., Seeley, J., Shahmanesh, M., Spindler, E. J., Stern, E., Turner, K. M., & Mannell, J. (2019). Beyond interviews and focus groups: a framework for integrating innovative qualitative methods into randomised controlled trials of complex public health interventions. *Trials, 20*(1), 329.

Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *Annals of Family Medicine, 13*(6), 554–561.

Sugg, H. V. R., Frost, J., & Richards, D. A. (2020). Personalising psychotherapies for depression using a novel mixed methods approach: an example from Morita therapy. *Trials, 21*(1), 41.

Rekommenderad läsning

Hong, Q. N., Gonzalez-Reyes, A., & Pluye, P. (2018). Improving the usefulness of a tool for appraising the quality of qualitative, quantitative and mixed methods studies, the Mixed Methods Appraisal Tool (MMAT). *Journal of Evaluation in Clinical Practice, 24*(3), 459–467.

Richards, D. A., Bazeley, P., Borglin, G., Craig, P., Emsley, R., Frost, J., Hill, J., Horwood, J., Hutchings, H. A., Jinks, C., Montgomery, A., Moore, G., Plano Clark, V. L., Tonkin-Crine, S., Wade, J., Warren, F. C., Wyke, S., Young, B., & O'Cathain, A. (2019). Integrating quantitative and qualitative data and findings when undertaking randomised controlled trials. *BMJ Open, 9*(11), e032081.

Tillfälle 9: Navigera kontext i komplex interventionsforskning

Obligatorisk läsning

Evans, R. E., Craig, P., Hoddinott, P., Littlecott, H., Moore, L., Murphy, S., O'Cathain, A., Pfadenhauer, L., Rehfuess, E., Segrott, J., & Moore, G. (2019). When and how do 'effective' interventions need to be adapted and/or re-evaluated in new contexts? The need for guidance. *Journal of Epidemiology and Community Health, 73*(6), 481–482.

Evans, R. E., Moore, G., Movsisyan, A., Rehfuess, E., ADAPT Panel, & ADAPT Panel comprises of Laura Arnold (2021). How can we adapt complex population health interventions for new contexts? Progressing debates and research priorities. *Journal of Epidemiology and Community Health, 75*(1), 40–45.

Moore, G., Campbell, M., Copeland, L., Craig, P., Movsisyan, A., Hoddinott, P., Littlecott, H., O'Cathain, A., Pfadenhauer, L., Rehfuess, E., Segrott, J., Hawe, P., Kee, F., Couturiaux, D., Hallingberg, B., & Evans, R. (2021). Adapting interventions to new contexts-the ADAPT guidance. *BMJ*, *374*, n1679.

Rekommenderad läsning

Movsisyan, A., Arnold, L., Evans, R., Hallingberg, B., Moore, G., O'Cathain, A., Pfadenhauer, L. M., Segrott, J., & Rehfuess, E. (2019). Adapting evidence-informed complex population health interventions for new contexts: a systematic review of guidance. *Implementation Science, 14*(1), 105.

Pfadenhauer, L. M., Gerhardus, A., Mozygemba, K., Lysdahl, K. B., Booth, A., Hofmann, B., Wahlster, P., Polus, S., Burns, J., Brereton, L., & Rehfuess, E. (2017). Making sense of complexity in context and implementation: the Context and Implementation of Complex Interventions (CICI) framework. *Implementation Science, 12*(1), 21.

Tillfälle 10: Beakta implementerbarhet i komplex interventionsforskning

Tillfälle 11: Strategier för att utveckla interventioner optimerade för implementering

Obligatorisk läsning

Klaic, M., Kapp, S., Hudson, P., Chapman, W., Denehy, L., Story, D., & Francis, J. J. (2022). Implementability of healthcare interventions: an overview of reviews and development of a conceptual framework. *Implementation Science, 17*(1), 10.

Rolland, B., Resnik, F., Hohl, S. D., Johnson, L. J., Saha-Muldowney, M., & Mahoney, J. (2021). Applying the lessons of implementation science to maximize feasibility and usability in team science intervention development. *Journal of Clinical and Translational Science, 5*(1), e197.

Svedin, F., Blomberg, O., Brantnell, A., Farrand, P., Åberg, A. C., & Woodford, J. (2023). Healthcare and community stakeholders' perceptions of barriers and facilitators to implementing a behavioral activation intervention for people with dementia and depression: a qualitative study using Normalization Process Theory. *BMC Geriatrics, 23*(1), 814.

Rekommenderad läsning

Coumoundouros, C., El Arab, R. A., Farrand, P., Hamilton, A., Sanderman, R., von Essen, L., & Woodford, J. (2023). Potential implementers' perspectives on the development and implementation of an e-mental health intervention for caregivers of adults with chronic kidney disease: qualitative interview Study. *JMIR Human Factors, 10*, e51461.

Coumoundouros, C., Farrand, P., Sanderman, R., von Essen, L., & Woodford, J. (2024). "Systems seem to get in the way": a qualitative study exploring experiences of accessing and receiving support among informal caregivers of people living with chronic kidney disease. *BMC Nephrology, 25*(1), 7.

Turner, K. M., Rousseau, N., Croot, L., Duncan, E., Yardley, L., O'Cathain, A., & Hoddinott, P. (2019). Understanding successful development of complex health and healthcare interventions and its drivers from the perspective of developers and wider stakeholders: an international qualitative interview study. *BMJ Open*, *9*(5), e028756.

UPPSALA UNIVERSITET

# Mall för kursplan/Template for course syllabus

Kurs på forskarnivå/Third-cycle (doctoral) course
Vetenskapsområdet för medicin och farmaci/
Disciplinary Domain of Medicine and Pharmacy

Mall fastställd av KUF/template approved by KUF 2022-12-13

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| **Förkunskapskrav:** | Antagen till forskarutbildning i Sverige. I mån av plats kan studenter antagna till forskarutbildning i andra nordiska länder också bli antagna. |
| **Maximalt antal deltagare:** | 20 |
| **Urval:** | Inget urval, dock möjlighet att styra antal deltagare ifall intresset är större är antalet platser tillgängliga. Forskarstuderande registrerade vid Uppsala universitet kommer prioriteras vid antagning. |
| **Övrig information:** | Kursen kommer att ges som hybridkurs. Studenter vid Uppsala universitet förväntas att delta på plats i Uppsala. Studenter utanför Uppsala universitet kan delta online. |
| **Kontakt:** | Joanne Woodford (joanne.woodford@uu.se) |
| **Fastställd, datum och nr:** | [här anges av KUF datumet som kursplanen fastställts, samt d-nr] |

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Mall fastställd av KUF/template approved by KUF 2022-12-13

The syllabus must be written in both Swedish and English, no headings may be deleted and all must be filled in. The syllabus will then be formally approved by the Research Training Committee (KUF), after which it will be the basis for the information in the course database and for reporting in LADOK.

| | |
|---|---|
| **Course code:** | FMF0114 |
| **Course title:** | Development and adaptation of Complex Healthcare Interventions |
| **Credits:** | 7,5 |
| **Level:** | Third-cycle (doctoral) education |
| **Course coordinator:** | Joanne Woodford |
| **Department responsible:** | Department of Women's and Children's Health |
| **Language of instruction:** | English |
| **Research track:** | Not applicable |
| **Description of course content:** | The overall goal of the course is to build a basic understanding of how to develop and/or adapt complex health care interventions following the UK Medical Research Council's Complex Interventions Framework. The course is especially suited to those who want to develop and/or adapt complex healthcare interventions that are optimized for implementation into real-world healthcare settings. The course will also have a focus on using participatory approaches, e.g., public contribution and co-design/co-production.<br>The course is designed around the key actions to be considered when developing and/or adapting a complex healthcare intervention (O'Cathain et al., 2019) including (1) planning the development process; (2) involving interest-holders; (3) evidence synthesis; (4) drawing upon theories and articulating the programme theory and logic model; (5) collecting qualitative and quantitative data; (6) understanding the context; and (7) paying attention to future implementation.<br>Further, the course will provide students with a simple toolkit to facilitate the application of the knowledge they have gained in their research. |
| **Types of instruction:** | The course comprises a series of lectures and seminars. Seminars will facilitate activity-based learning, such as class discussions, case studies, debates, peer review, role-play, and simulated data collection exercises. Interactional seminars are designed to help students apply the knowledge gained during the course to their research. |
| **Intended learning outcomes:** | After completing the course, the students should be able to:<br>• Define what a complex healthcare intervention is;<br>• Understand the key actions involved in developing and/or adapting interventions, following the MRC's Complex Interventions Framework; |

- Identify and apply appropriate strategies for meaningfully involving multiple interest holders, including members of the public, in intervention development;
- Understand how to conduct an evidence synthesis to inform the development and/or adaptation of an intervention;
- Use relevant theories and frameworks to articulate the intervention programme theory and logic model;
- Design appropriate quantitative, qualitative, and mixed methods research studies to inform the development and/or adaptation of an intervention;
- Plan how to collect data to understand the context in which the intervention will be used and how to inform the adaptation of interventions for other contexts;
- Identify and apply approaches to optimize the future implementation potential of an intervention.

**Examiner:** Joanne Woodford

**Compulsory components:** Students are expected to prepare well before all teaching sessions and read three core articles before each seminar.

Since collaborative learning is seen as important, attendance at seminar sessions is mandatory, and only one seminar can be missed. Missed seminars will be replaced with writing tasks or alternative replacement tasks.

**Assessment format:** **Active participation**: Active participation at all occasions is required. Students are expected to prepare well before all teaching sessions and read three core articles before each seminar.

**Poster session**: Each student will individually create a Poster to present during teaching session 7. Students should develop a logic model for the intervention based on the complex intervention they plan to /have developed in their research. During the poster session, each student will have five minutes to present their logic model, followed by a followed by a five minutes discussion. The Poster session is an opportunity for students to present their ideas and gain feedback on how to develop logic models.

**Examination paper**: Each student will individually write a paper presenting a research proposal for the development and/or adaptation of a complex intervention. The proposal will need to include a literature review to justify the need for the intervention, a plan for involving interest-holders, a proposed logic model for the intervention, and propose a series of research studies to inform the development of the intervention. Students will be provided a separate template for the paper according to what a funding application template could actually look like, including headings and specified number of characters.

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| | The paper will be around 6 pages (approximately 3-4000 words) + references. Students send the paper to each other for peer review. Each student will be the main reviewer on one proposal. |
| **Reading list:** | Course literature detailed below is subject to change as will be updated, where appropriate, with more current resources prior to the course being run. |

Session 1: An introduction to the MRC Complex Interventions Framework

Session 2: How to plan the intervention development process

Mandatory reading

O'Cathain, A., Croot, L., Duncan, E., Rousseau, N., Sworn, K., Turner, K. M., Yardley, L., & Hoddinott, P. (2019). Guidance on how to develop complex interventions to improve health and healthcare. *BMJ Open, 9*(8), e029954.

O'Cathain, A., Croot, L., Sworn, K., Duncan, E., Rousseau, N., Turner, K., Yardley, L., & Hoddinott, P. (2019). Taxonomy of approaches to developing interventions to improve health: a systematic methods overview. *Pilot and Feasibility Studies, 5,* 41.

Skivington, K., Matthews, L., Simpson, S. A., Craig, P., Baird, J., Blazeby, J. M., Boyd, K. A., Craig, N., French, D. P., McIntosh, E., Petticrew, M., Rycroft-Malone, J., White, M., & Moore, L. (2021). A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. *BMJ, 374*, n2061.

Recommended reading

Bleijenberg, N., de Man-van Ginkel, J. M., Trappenburg, J. C. A., Ettema, R. G. A., Sino, C. G., Heim, N., Hafsteindóttir, T. B., Richards, D. A., & Schuurmans, M. J. (2018). Increasing value and reducing waste by optimizing the development of complex interventions: enriching the development phase of the Medical Research Council (MRC) Framework. *International Journal of Nursing Studies, 79*, 86–93.

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Session 3: Participatory approaches to intervention development and adaptation

Mandatory reading

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Session 4: An introduction to evidence synthesis

Session 5: Using evidence synthesis in intervention development and adaptation

Mandatory reading

Khalil, H., & Tricco, A. C. (2022). Differentiating between mapping reviews and scoping reviews in the evidence synthesis ecosystem. *Journal of Clinical Epidemiology, 149*, 175–182.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., … Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ, 372*, n71. Munn, Z., Pollock, D., Barker, T. H., Stone, J., Stern, C., Aromataris, E., Schünemann, H. J., Clyne, B., Khalil, H., Mustafa, R. A., Godfrey, C., Booth, A., Tricco, A. C., & Pearson, A. (2023). The Pandora's Box of Evidence Synthesis and the case for a living Evidence Synthesis Taxonomy. *BMJ Evidence-Based Medicine, 28*(3), 148–150.

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Session 6: How to develop a programme theory and logic model

Mandatory reading

Duncan, E., O'Cathain, A., Rousseau, N., Croot, L., Sworn, K., Turner, K. M., Yardley, L., & Hoddinott, P. (2020). Guidance for reporting intervention development studies in health research (GUIDED): an evidence-based consensus study. *BMJ Open*, *10*(4), e033516.

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De Silva, M. J., Breuer, E., Lee, L., Asher, L., Chowdhary, N., Lund, C., & Patel, V. (2014). Theory of Change: a theory-driven approach to enhance the Medical Research Council's framework for complex interventions. Trials, 15, 267.

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Session 7: An introduction to different research designs to inform intervention development and adaptation

Mandatory reading

Blomberg, O., Svedin, F., Farrand, P., Brantnell, A., von Essen, L., Patriksson Karlsson, J., Åberg, A. C., & Woodford, J. (2024). Adaptation of a guided low-intensity behavioral activation intervention for people with dementia in Sweden: a qualitative study exploring the needs and preferences of key stakeholders. *BMC Geriatrics, 24*(1), 113

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Turner, K. M., Percival, J., Kessler, D., & Donovan, J. L. (2019). Synthesizing qualitative data sets to improve the design of trials and complex health interventions: a worked example. *Qualitative Health Research, 29*(5), 693–699.

Session 8: Using integrative mixed methods approaches to inform intervention development and adaptation

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Hong, Q. N., Gonzalez-Reyes, A., & Pluye, P. (2018). Improving the usefulness of a tool for appraising the quality of qualitative, quantitative and mixed methods studies, the Mixed Methods Appraisal Tool (MMAT). *Journal of Evaluation in Clinical Practice*, *24*(3), 459–467.

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Session 9: Navigating context in complex intervention research

Mandatory reading

Evans, R. E., Craig, P., Hoddinott, P., Littlecott, H., Moore, L., Murphy, S., O'Cathain, A., Pfadenhauer, L., Rehfuess, E., Segrott, J., & Moore, G. (2019). When and how do 'effective' interventions need to be adapted and/or re-evaluated in new contexts? The need for guidance. *Journal of Epidemiology and Community Health*, *73*(6), 481–482.

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Moore, G., Campbell, M., Copeland, L., Craig, P., Movsisyan, A., Hoddinott, P., Littlecott, H., O'Cathain, A., Pfadenhauer, L., Rehfuess, E., Segrott, J., Hawe, P., Kee, F., Couturiaux, D., Hallingberg, B., & Evans, R. (2021). Adapting interventions to new contexts-the ADAPT guidance. *BMJ*, *374*, n1679.

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Movsisyan, A., Arnold, L., Evans, R., Hallingberg, B., Moore, G., O'Cathain, A., Pfadenhauer, L. M., Segrott, J., & Rehfuess, E. (2019). Adapting evidence-informed complex population health interventions for new contexts: a systematic review of guidance. *Implementation Science*, *14*(1), 105.

Pfadenhauer, L. M., Gerhardus, A., Mozygemba, K., Lysdahl, K. B., Booth, A., Hofmann, B., Wahlster, P., Polus, S., Burns, J., Brereton, L., & Rehfuess, E. (2017). Making sense of complexity in context and implementation: the Context and Implementation of Complex Interventions (CICI) framework. *Implementation Science*, *12*(1), 21.

Session 10: Considering implementability in complex interventions research

Session 11: Strategies for developing interventions optimized for implementation

Mandatory reading

Klaic, M., Kapp, S., Hudson, P., Chapman, W., Denehy, L., Story, D., & Francis, J. J. (2022). Implementability of healthcare interventions: an overview of reviews and development of a conceptual framework. *Implementation Science*, *17*(1), 10.

UPPSALA UNIVERSITET

# Mall för kursplan/Template for course syllabus

Kurs på forskarnivå/Third-cycle (doctoral) course
Vetenskapsområdet för medicin och farmaci/
Disciplinary Domain of Medicine and Pharmacy

Mall fastställd av KUF/template approved by KUF 2022-12-13


Rolland, B., Resnik, F., Hohl, S. D., Johnson, L. J., Saha-Muldowney, M., & Mahoney, J. (2021). Applying the lessons of implementation science to maximize feasibility and usability in team science intervention development. *Journal of Clinical and Translational Science, 5*(1), e197.

Svedin, F., Blomberg, O., Brantnell, A., Farrand, P., Åberg, A. C., & Woodford, J. (2023). Healthcare and community stakeholders' perceptions of barriers and facilitators to implementing a behavioral activation intervention for people with dementia and depression: a qualitative study using Normalization Process Theory. *BMC Geriatrics, 23*(1), 814.


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Coumoundouros, C., El Arab, R. A., Farrand, P., Hamilton, A., Sanderman, R., von Essen, L., & Woodford, J. (2023). Potential implementers' perspectives on the development and implementation of an e-mental health intervention for caregivers of adults with chronic kidney disease: qualitative interview Study. *JMIR Human Factors, 10*, e51461.

Coumoundouros, C., Farrand, P., Sanderman, R., von Essen, L., & Woodford, J. (2024). "Systems seem to get in the way": a qualitative study exploring experiences of accessing and receiving support among informal caregivers of people living with chronic kidney disease. *BMC Nephrology, 25*(1), 7.

Turner, K. M., Rousseau, N., Croot, L., Duncan, E., Yardley, L., O'Cathain, A., & Hoddinott, P. (2019). Understanding successful development of complex health and healthcare interventions and its drivers from the perspective of developers and wider stakeholders: an international qualitative interview study. *BMJ Open, 9*(5), e028756.


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| **Admission requirements:** | Admission to third-cycle education in Sweden. Students admitted to postgraduate studies in other Nordic countries may also be admitted if space allows. |
| **Maximum participants:** | 20 |
| **Selection:** | No selection, however, there is the possibility to control the number of participants if the interest is greater than the number of places available. Doctoral students registered at Uppsala University will be given priority for admission. |
| **Other information:** | The course will be delivered as a hybrid course. Students located at Uppsala University will be expected to attend in person in Uppsala. Students located outside of Uppsala University can attend online. |
| **Contact:** | Joanne Woodford (joanne.woodford@uu.se) |
| **Approved, date and number:** | [här anges av KUF datumet som kursplanen fastställts, samt d-nr] |