



**Karolinska  
Institutet**

Course syllabus for

# **Magnetic resonance tomography, 30 credits**

Magnetisk resonanstomografi, 30 hp

This course syllabus is valid from autumn 2024.

Please note that the course syllabus is available in the following versions:

[Autumn2010](#) , [Autumn2011](#) , [Autumn2014](#) , [Spring2015](#) , [Spring2019](#) , [Autumn2023](#) , [Autumn2024](#)

Course code	2QA146
Course name	Magnetic resonance tomography
Credits	30 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Radiography
Level	Second cycle, has only first-cycle course/s as entry requirements
Grading scale	Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Styrelsen för utbildning
Decision date	2010-02-19
Revised by	Education committee CLINTEC
Last revision	2023-10-10
Course syllabus valid from	Autumn 2024

## **Specific entry requirements**

At least 120 credits in which it should be included a Degree of Bachelor of Science in Diagnostic Radiology Nursing. In addition, proficiency in Swedish and English equivalent to Swedish B/Swedish 3 and English A/English 6.

## **Objectives**

### **Technology and physical principles, 10.5 hp**

Grading scale: GU

## **Pathophysiology and research methodology, 12.0 hp**

Grading scale: GU

## **Literature review, 7.5 hp**

Grading scale: GU

## **Examination**

## **Transitional provisions**

Examination will be provided during a period of one year after a possible closing of the course. Examination can be carried out according to an earlier literature list during a period of one year after the date of a renewal of the literature list.

## **Other directives**

Evaluation of the course will be carried out according to the guidelines that are established by the Board of Education at Karolinska Institutet.

Language of instruction: Swedish.

## **Literature and other teaching aids**

### **Technology and physical principles**

*McRobbie, Donald W.; Moore, Elizabeth A.; Graves, Martin J*

#### **MRI from picture to proton**

3. ed. : Cambridge : Cambridge University Press, 2017 - 383 pages

ISBN:9781107643239 LIBRIS-ID:20912353

[Library search](#)

*Westbrook, Catherine; Talbot, John*

#### **MRI in practice**

Fifth edition : Hoboken, NJ : Wiley Blackwell, 2019 - xviii, 395 pages

ISBN:9781119391968 LIBRIS-ID:8jpsbrc76bnf55z7

[Library search](#)

## **Pathophysiology and research methodology**

*Puls, Ralf.*

### **Whole-body MRI Screening**

*Hosten, Norbert.*

Berlin, Heidelberg : Springer Berlin Heidelberg, 2014 - XII, 374 p. 208 illus., 5 illus. in color.

ISBN:9783642552014 LIBRIS-ID:16838330

URL: [Online access for KIB](#)

[Library search](#)

*Roth, Christopher G.; Deshmukh, Sandeep*

**Fundamentals of Body MRI**

Elsevier, 2017

LIBRIS-ID:7hrt9t0l5d0pz08l

URL: [Online access for KIB](#)

*Carlos Zamora; Mauricio Castillo*

**Neuroradiology Companion: Methods, Guidelines, and Imaging Fundamentals**

5 : Lippincott, Williams & Wilkins, 2016

LIBRIS-ID:r19ctjs8pc0td5vx

URL: [Online access for KIB](#)

**Whats New for Clinical Whole-body MRI (WB-MRI) in the 21st Century**

*Tunariu, Nina; Blackledge, Matthew; Messiou, Christina; Petralia, Giuseppe; Padhani, Anwar; Curcean, Sebastian; Curcean, Andra; Koh, Dow-Mu*

2020 Ingår i:

**The British journal of radiology : BJR**

1997-

LIBRIS-ID:5mgcvwpr3hkcqctt

93 (2020) :1115, s. 20200562

**Literature review**

*Forsberg, Christina; Wengström, Yvonne*

**Att göra systematiska litteraturstudier : värdering, analys och presentation av omvårdnadsforskning**

4. rev. utg. : Stockholm : Natur & kultur, 2016 - 216 s.

ISBN:9789127146549 LIBRIS-ID:18897539

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