

Course literature Mathematical Statistics 2021/2022

MASA02: Mathematical Statistics: Basic course:

Anevski, D. *A concise introduction to Mathematical Statistics*, Studentlitteratur (2017), second printing of the book.

MASB02 Matematisk statistik för kemister:

Olbjer, L.: *Experimentell och industriell statistik*, Femte upplagan, augusti 2000 (KFS AB)
Zetterqvist, L. & Lindström, J.: *Räkna med variation — ett arbetsmaterial i sannolikhetslära och statistisk inferens* (Studentlitteratur).

MASB03 - Matematisk statistik för fysiker:

Blom, G., Enger, Jan., Englund, Gunnar., Grandell, Jan., & Holst, Lars., (2017). *Sannolikhets teori och statistikteori med tillämpningar*. (Sjunde upplagan). Lund: Studentlitteratur AB.
ISBN:9789144123561
Matematisk statistik: *Kompletterande övningar till Sannolikhets teori och statistikteori med tillämpningar*. Säljs på KFS

MASB11 - Matematisk statistik: Biostatistisk grundkurs:

Olsson Ulf, Englund Jan-Eric och Engstrand Ulla: *Biometri - Grundläggande biologisk statistik*, Studentlitteratur 2005, ISBN:9789144045771

MASC01: Probability theory:

A. Gut, *An Intermediate Course in Probability Theory*, Springer 2nd ed. 2009.

MASC02: Inference theory:

E.L. Lehman, G. Casella, *Theory of Point Estimation*, Springer 1998. E.L. Lehman, J.P. Romano, *Testing Statistical Hypothesis*, Springer 2005.

MASC03: Markov processes:

Rydén, T och Lindgren, G: *Markovprocesser*, KFS, 2002. or
Norris, J. R.: *Markov Chains*, Cambridge Series in Statistical and Probabilistic Mathematics

MASC04: Stationary stochastic processes:

G. Lindgren, H. Rootzén, M. Sandsten: *Stationary stochastic processes for scientists and engineers*, CRC Press, 2013, ISBN-13: 978-1-4665-8618-5.

MASC05: Design of Experiments:

Box, Hunter and Hunter: *Statistics for Experimenters*, Wiley, 2nd ed. (2005)

MASM11: Monte Carlo methods for statistical inference:

Geof H. Givens and Jennifer A. Hoeting: *Computational Statistics*, Second Edition Wiley (2012)

MASM12: Non-linear Time Series Analysis:

H. Madsen, J. Holst & E. Lindström (2010): *Modelling Non-Linear and Non-Stationary Time Series*

MASM15: Statistical Modelling of Extreme Values:

Coles, S.: *An Introduction to Statistical Modelling of Extreme Values*. Springer-Verlag, London, 2001.

MASM17: Time series analysis:

Andreas Jakobsson, *An Introduction to Time Series Modeling* (2nd edition), Studentlitteratur, 2015.

MASM18: Financial statistics:

Lindström, E., Madsen, H and Nielsen, J. N. (2015) , *Statistics for Finance* CRC Press/Chapman Hall

MASM22:, Linear and Logistic Regression:

Rawlings, J.O., Pantula, S.G., Dickey, D.A.: *Applied Regression Analysis - A Research Tool*, 2ed, Springer, available as e-book.

Agresti, A.: *An Introduction to Categorical Data Analysis*, 2ed Springer, available as e-book.

MASM24: Valuation of Derivative Assets:

Björk, T. (2009): *Arbitrage Theory in Continuous Time*. Oxford University Press, Oxford.

Åberg, S. (2019) *Derivative Pricing*. Mathematical Statistics, Lund.

MASM25: Spatial statistics with image analysis:

A. Gelfand P. Diggle P. Guttorp M. Fuentes (Eds), *Handbook of Spatial Statistics*.

MASM26: Stationary and non-stationary Spectral Analysis:

Stoica & Moses, *Spectral Analysis of Signals*, Prentice-Hall, 2005.

MASM33, Mathematical Statistics: Quantitative Risk Management using Copulas:

Mai, J. & Scherer, Matthias.(2012). *Simulating copulas: stochastic models, sampling algorithms and applications*. London: World Scientific. ISBN: 9781848168749

Beirlant, J., Goegebur, Yuri., Teugels, Jozef., Segers, Johan., Waal, Daniel de. & Ferro, Chris.(2004). *Statistics of extremes theory and applications*. Chichester: J. Wiley.

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