

# BIO335 - Applied Biocatalysis and Biorefining

For NMBU students and BioCat students (<https://biocat.no/>)

Place: NMBU, room TF3-102: [TF3-102, TF fløy3, NMBU - MazeMap](#)

Time: August 21-25, 2023

## Lecture plan 2023 -draft

### Monday August 21

- 09.15-10.00 [Svein Horn](#) – Welcome and Introduction to the course
- 10.15-12.00 [Vincent Eijsink](#) – Enzymology
- 12.00-13.15 Lunch on your own
- 13.15-15.00 [Svein Horn](#) – lignocellulosic biomass- composition and analysis

### Tuesday August 22

- 08.15-10.00 [Aniko Varnai](#) – Pretreatment and enzymatic degradation of lignocellulosic biomass
- 10.15-12.00 [Sabina Leanti La Rosa](#) - Where do biocatalysts come from?
- 12.00-13.15 Lunch on your own
- 13.15-15.00 [Svein Jarle Horn](#) – Fermentation processes – Whole cell biocatalysts

### Wednesday August 23

- 08.15-10.00 [Svein Horn](#) - Fermentation -research examples from NMBU
- 10.15-12.00 [Svein Horn](#) –Biogas production – microbial communities as biocatalysts
- 12.00-13.15 Lunch on your own
- 13.15-15.00 [Dana Byrtusova](#) (Realtek) – Microbial oils

### Thursday August 24

- 08.15-10.00 [Duncan Akporiaye](#) (SINTEF) - Techno-economic aspects and non-biological biorefining tools
- 10.15-12.00 [Vera Novy](#) (Borregaard) - The role of biocatalysis in biorefining
- 12.00-13.15 Lunch on your own
- 13.15-15.00 [Arild Johannessen](#) (G2F) – Gas fermentation

### Friday August 25

- 08:15-10.00 [Paulo Teixeira](#) (Mycorena, Sweden) – Mycoprotein: A sustainable and versatile food solution (Online)
- 10.15-12.00 [Marije Oostindjer](#) (Norilia) - Implementing enzymatic hydrolysis of rest raw materials from meat
- 12.00-13.15 Lunch on your own
- 13.15-14.00 [Svein Horn](#) – Summary, student assignment, Q&A

Deadline for completing student assignment: **November 20<sup>th</sup> 2023**