## **Didactic foundation**

The aim of TECH is to meet the students where they are; to give the individual student the best conditions for their academic and personal development. This requires a constant dialogue and development of our teaching and the facilities – in interaction between the student, the lecturer, and the institution. Therefore, TECH has composed this didactic foundation with the purpose to support the dialogue about teaching between the three key players:



The following pages describe what these actors can do to contribute to successful learning. The purpose of this document is not to be normative, but to form the basis for dialogue and debate among students, lecturers, and management. What is interesting is how successful teaching and learning are practiced, how to weigh the (sometimes conflicting) wishes, how to work with development etc.

The physical environment also affects the conditions for good teaching and learning. Therefore, this document should also be used in discussions of specific projects when renovating or building teaching and learning facilities.



## The student ...

#### Engages in own learning

- Participates actively: Asks about what is not understood, discusses with the teacher and fellow students, seeks out knowledge, seeks feedback
- Prepares according to the expectations
- Assesses which learning resources best support own learning both physical and digital
- Is curious preferably also outside materials

#### Establishes good conditions for own learning

- Reflects on own learning
- Accepts that learning requires a (large) effort
- Prioritizes own time including prioritization between work, leisure, and studies
- Is open to opportunities (student jobs, research,...)
- Shows up well-rested

#### Contributes to a good learning environment

- Respects their fellow students and contributes to a professional environment
- Contributes to a good social environment
- Contributes to a safe environment
- Collaborates with fellow students
- Contributes to systematic quality assurance work, for example by answering evaluations



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## The lecturer ...



- Has an eye for the student(s)
- Shows respect for the student
- Shows an interest in the student
- Challenges the student
- Believes in the student's potential to develop
- Keeps her/his agreements with the students
- Is available and spends time with the students
- Differentiates the teaching so that it is based on the student's competences

#### Creates an inspiring learning environment

- Provides specific, well-founded, focused, forward-looking, and timely feedback
- Creates commitment in the teaching situation
- Has an active stance on the form of instruction that provides the best learning
- Stimulates dialogue/interaction in the important physical teaching
- Avoids monotony by varying the teaching methods
- Make good use of digital possibilities
- Deliberately integrates own personal, interpersonal and professional competencies
- Supports learning in communities (group work, project work)
- Supports a culture characterized by "no stupid question" and "acceptance of errors"
- Ensures freedom of choice for the students, for example in relation to project assignments, learning resources, open assignments,...
- Aligns teaching, exams, and learning activities to learning outcome, and discusses these with the students
- Awareness of the balance between practical elements and theoretical elements
- Awareness of the balance between types of teaching activities (lecture, lab work, problem solving,...)



#### Demonstrates high subject knowledge

- Keeps the teaching content relevant in relation to the employers' needs, as well as development and research within the area
- Motivates her/his course, puts it into context
- Creates a link between practical and theoretical elements



#### Ensures coherence with other disciplines and society

- Ensures a common thread within the semester and across semesters by having knowledge of and providing explicit references to other elements of the study programme
- Ensures awareness of the societal relevance of the programme
- Coordinates with other lecturers in relation to deadlines, etc.
- Ensures progression in the study programme
- The actual strain on the course corresponds to the formal scope





## The institution ...

#### Ensures good educational facilities and physical surroundings

- Rooms: Good indoor climate, cleanliness, power, well-functioning AV equipment, well-functioning tables and chairs
- Workshops and laboratories for practical work
- Makes study spaces and group rooms available to students
- Where possible, available 24/7
- Well-functioning digital learning tools
- Areas of identity for students on the same study programme
- Availability
- Good opportunities for food, etc.
- Good physical infrastructure

#### Ensures optimal planning

- Exams spread out over the exam period
- Teaching schedule available quickly
- By involving the wishes of lecturers and students
- Possible for the student to create a schedule without conflicts Necessary number of teaching hours per student

#### Facilitates co-operation between relevant stakeholders

- Co-operation between lecturers
- Co-operation between lecturers and administration
- Co-operation lecturers and heads of studies

# Ensures opportunities for upgrading of qualifications and competency development



- Forums for discussions about teaching
- Ongoing competency development within didactics and other fields based on the individual's wishes and needs





By the end of 2021, the Vice-dean for Education appointed a working group with the task of formulating a draft for a didactic foundation for teaching at TECH. This document is the result of the working group, which was completed in December 2022.

Members of the working group:

- Jens Bennedsen, Professor (Docent) ECE (chair of working group)
- Maibritt Hjorth, Director of Studies AU Engineering
- Bernd Wollenweber, Director of Studies agricultural, animal, and food science
- Claus Melvad, Professor (Docent) MPE
- Jette Feveile Young, Associate Professor FOOD
- Johan Christian Steffensen Clausen, Head of Study Programme CAE
- Emil Hedemann Hougaard, student and student instructor BCE
- Geir Egil Dahle Øien, Professor NTNU

During the work, the working group has held a number of meetings with the focus on identifying how other institutions have explicated a didactic foundation for teaching and learning.

In addition, a number of workshops have been held with students about their views on good teaching.

Workshops have been held with all TECH's Heads of Programme, a questionnaire survey have been issued among TECH's academic staff (with more than 230 responses), workshops with interested lecturers, as well as meetings with the NAT-TECH Study Administration and NAT-TECH Building Services.