Studying at RWTH Aachen University
Basic tools for successful studies & learning strategies

Student Advisory Centre
RWTH Aachen University
Overview

• Introduction Student Advisory Centre

• Team Students
  o Difference School – University
  o Study Structure
  o University Life

• Psychological Counselling
  o How we work
  o Learning Strategies
    – Time Management
    – Concentration
    – Memory Strategies
    – Motivation
The RWTH Aachen Student Advice Centre

Student Advisory Centre
Target group: students

- General advising and offers for students
- Psychological Counselling

- Neutral and impartial advising: Focus is placed on students’ concerns and problems and on finding a good, individually tailored solution!
- Helping students help themselves
- All services are free of charge and confidential
- The services are offered to all students studying under public law at RWTH*.

*Students of the RWTH International Academy can get advice of the student counsellor of the RWTH Academy.
Studies are an adventure

- Familiar structures are behind you
- University life means personal responsibility
- Friends from school disperse throughout the world
- Germany: a new world
- No more “all inclusive Mama Hotel”
- What will I eat tomorrow?
- How do I do laundry?
- How far can I get with my pocket money?
- How do I make new friends?

Exciting experiences that can offer enriching insights
University life? What’s different than in school?
# University life? What’s different than in school?

<table>
<thead>
<tr>
<th>School</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed class</td>
<td>Large cohort</td>
</tr>
<tr>
<td>Teachers know pupils</td>
<td>Anonymity</td>
</tr>
<tr>
<td>Set schedule</td>
<td>Flexible schedule</td>
</tr>
<tr>
<td>Attendance required</td>
<td>Attendance rarely required</td>
</tr>
<tr>
<td>Subject matter in school:</td>
<td>Subject matter at university:</td>
</tr>
<tr>
<td>• Edited and taught at an age-appropriate level</td>
<td>• Very abstract and dense amount of information</td>
</tr>
<tr>
<td>• Material worked on interactively</td>
<td>• Quick pace</td>
</tr>
<tr>
<td>• “Bit by bit”</td>
<td>• 6-8 times more material</td>
</tr>
</tbody>
</table>
University life? What’s different than in school?

Learning and study strategies from school don‘t work at University:

• Degree of difficult increases:
  – Rework, reread, ask again
  – Don‘t start exam prep just 2-3 weeks before the exam

• Lectures are just an “appetizer”

• Lots of theory and fundamental knowledge at the beginning

Summary and To Do:
• Independently learn material and then practice
• Concentrate at home or in a study group
Summary: University life, what should I say goodbye to?

- The expectation, someone will tell me, what I should do

- Passive behavior: others may make sure you show up and do the work in school, but not at university

- Studying is an active behavior!!!

- Be proactive and responsible for yourself

- Self-management
Example: Engineering studies - simplified structure -

- **Objective**: research engineering (Dr. Ing.)
- **Continuation of technical specialization**
- **Application and research orientation**: Choose a specialization
- **Broad fundamental orientation**

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Academic Year

1st core semester
October to February
Lectures, Tutorials, Seminars

February to April
Exam Period

2nd core semester
April to July
Lectures, Tutorials, Seminars

July to October
Exam period
# Mechanical Engineering Studies

<table>
<thead>
<tr>
<th>Semester</th>
<th>Mathematische u. Naturwissenschaftliche Grundlagen</th>
<th>Ingenieurwissenschaftliche Grundlagen</th>
<th>Gesellschaftliche Grundlagen</th>
<th>Systemwissenschaftliche Grundlagen</th>
<th>Vertiefungsfächer mit Wahlmodulen</th>
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</table>
| 1. Semester | Mathematik I  
Physik  
Chemie | Einführung in den Maschinenbau  
Mechanik I  
Maschinengestaltung I | Kommunikation / Organisation-entwicklung | | |
| 2. Semester | Mathematik II | Mechanik II  
CAD-Einführung  
Elektrotechnik  
Thermodynamik | | Informatik | |
| 3. Semester | Mathematik III | Mechanik III  
Werkstoffkunde I  
Thermodynamik II  
Maschinengestaltung II&III | | Messtechnisches Labor | |
| 4. Semester | Numerische Mathematik | Maschinengestaltung II  
Werkstoffkunde II  
Strömungsmechanik I | | Simulations-technik | - Energie / Verfahrenstechnik
- Konstruktionstechnik
- Kunststoff- und Textiltechnik
- Produktionstechnik
- Fahrzeugtechnik
- Luftfahrttechnik

| 5. Semester | | Wärme- und Stoffübertragung | Business Engineering | | |
| 6. Semester | Projektarbeit  
(6 Wochen) | | Qualitäts- und Projekt-management | | |
| 7. Semester | Bachelorarbeit (10 Wochen) + Projektarbeit (6 Wochen) | | | |
Modular Studies

- **Modules**: teaching units grouped by topic or method lasting one or two semesters per academic year.
- Modules are designated as either compulsory, compulsory elective, and elective.
- Every module ends with an exam or proof of performance: e.g. written or oral exam, paper, project
- **ECTS**: Effort per module

![Diagram]

- e.g. Module: Higher Mathematics 7 ECTS
  - Lecture
  - Tutorial
  - Potential internship

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Zentrale Studienberatung der RWTH Aachen
### University life, what it can look like…
#### Stundenplan 1. Fachsemester Traumstudium

<table>
<thead>
<tr>
<th>Montag</th>
<th>Dienstag</th>
<th>Mittwoch</th>
<th>Donnerstag</th>
<th>Freitag</th>
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<td>ENGLISCHKURS</td>
<td>Zuhaue: STUDIENZEIT Vorlesung</td>
<td>PARTY</td>
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What topics does the team deal with?

- Questions about beginning studies and orienting oneself at the start
- Beginners’ frustration during studies: lack of motivation, pressure to perform, exam problems, difficulty orienting oneself
- Doubting the choice to study and how to orient oneself
- Financial, social, or sickness-related events influencing students’ studies and lives
- Initial thoughts about job and career planning
The RWTH Aachen Student Advisory Centre

Student Advisory Centre
Target group: students

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<th>General advising and offers for students</th>
<th>Psychological counselling</th>
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- Neutral and flexible advising: Focus is placed on students’ concerns and problems and on finding a good, individually tailored solution!
- Helping students help themselves
- All services are free of charge and confidential
Psychological Counselling – How we work
When can I go to Psychological Counselling?

Student Advisory Centre
Target group: students

Psychological Counselling Team

- Study strategies
- Symptoms of stress
- Procrastination
- Exam anxiety and other anxiety/fears
- Mood swings
- Relationship problems
- Personal crises and conflicts

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Psychological Counselling

Personal stress  Difficulties with studies
Psychological Counselling
Psychological Counselling

- Personal Counselling
- Academic Trainings
Academic trainings of the Psychological Counselling

Learning strategies
- Time Management
- Memory
- Concentration

Academic trainings
- What is my goal?
- Procrastination

Motivation

Coping strategies
- Exam anxiety
- Confident communication
- Stress management
- Managing study and child
Learning strategies
Time Management: The ALPEN-Strategy

A (Aufgaben)  List All tasks
L (Länge schätzen)  Estimate the Length
P (Pufferzeiten)  Plan buffer time
E (Entscheidungen)  Establish priorities
N (Nachkontrolle)  Note what went well or wrong
Concentration

• Concentration is similar to the light of a torch:

• Hard ware:
  Physiological ability

• Surrounding:
  Distraction

• Focus:
  Attention
Don’t work for more than 45 minutes at a time. A short break is often sufficient for strengthening our ability to concentrate again.
Concentration: Let’s take a break!

Interruptions are not breaks!

Breaks are not buffers!

Make sure you do something different during the breaks!

Plan how you end the breaks and get to work again!
Concentration: Let’s take a break!

- 5 minute-short break: open a window for some fresh air, short exercise to move your body, take out the trash, drink something, breathing exercises

- 20-min relaxation break: go for a walk, hang up laundry, juggle, eat snack/fruit, drink something, relaxation exercises, reward yourself for work accomplished

- 1h relaxation break: eat lunch, power nap, go for a walk, sports/work out, listen to music, meet friends, cook
Memory: Experiment - Try to remember the lines
Take paper and pencil and try to recall the lines!
Memory: Experiment - This is what it looked like!
Memory: Experiment - What helped you remember?
Memory: Experiment - What helped you remember?
Memory: Experiment - What helped you remember?

- Strategies for reproduction:
  - Turn lines into larger **chunks**
  - “V”, “V”, “I”, “N”, “D” (5 chunks) or “WIND” (1 chunk)

- The better we can **summarize** information in our short-term memory, the more information we can process simultaneously.

- The better our **understanding**, the more prior knowledge we have, and thus we have a better overview, helping us find good chunks easily.

- The word “wind” serves as a **key**, which I can use to easily find the individual lines in my long-term memory.
Memory Strategies

- Activate, what you know already!
- Be curious about what you learn!
- Understand what you learn!
- Find good examples and visualization!
- Use different learning methods!
- Structure what you learn!
One Memory Strategy: Mind-Map
Motivation: What students often say

I must?
Motivation: Turn pressure ...
... into real motivation!
Motivation Strategies

- Your task should be challenging but not too easy!
- Make sure you get feedback!
- Plan rewards after the learning session!
- Study in groups!
- Set your eyes on the prize - set a goal!
- Imagine, how your goal will look like!
- Plan little steps, how to achieve your goal!
- Start today with realizing the first step!

Dipl. Ing. Mei Zhou, Swenja Schiwatsch M.A., Dipl.-Psych. Van Tien Tran und Dipl.-Psych Sabine Salentin
Zentrale Studienberatung der RWTH Aachen
Which stone will you put into the glass today?
Where can you find us at RWTH?

Student Advisory Centre
Target group: students

Advising Team and Offers for Students
Psychological Counselling Team

Templergraben 83/ corner of Pontstr., 52062 Aachen

www.rwth-aachen.de/studienberatung
www.rwth-aachen.de/psychologische-beratung

Make an appointment:
studienberatung@rwth-aachen.de
To make an individual appointment:
Psych.Beratung@rwth-aachen.de

Information and registration for academic trainings:
www.rwth-aachen.de/studientrainings

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