

General operating instructions  
for Kassel University  
workshops and studios

– Workshop and Studio regulations –

Faculty / organisation:.....

Institute / expert group:.....

Applies to rooms:.....

Workshop head in charge:.....

Telephone:.....

Deputy Workshop head:.....

Telephone:.....

2 List of contents

<b>List of contents:</b>		<b>Page</b>
<b>1</b>	<b>Cover sheet</b>	<b>1</b>
<b>2</b>	<b>List of contents</b>	<b>2</b>
<b>3</b>	<b>Scope of application, miscellaneous</b>	<b>3</b>
<b>4</b>	<b>Responsibilities</b>	<b>4</b>
<b>5</b>	<b>Risks to persons and environment</b>	<b>4</b>
<b>6</b>	<b>Protective measures and rules of conduct</b>	<b>5</b>
<b>7</b>	<b>Conduct in case of danger</b>	<b>9</b>
<b>8</b>	<b>Principles of first aid</b>	<b>10</b>
<b>9</b>	<b>Correct disposal</b>	<b>11</b>
<b>10</b>	<b>Taking effect</b>	<b>12</b>
 <b>Appendix:</b>		
<b>A 1</b>	<b>Special regulations for the work area</b>	<b>12</b>
	<i>These general studio and workshop regulations should if necessary be supplemented by documents shown in Appendix A that are specific to individual studio types such as metal, wood and electrics! Otherwise please mark "not applicable".</i>	
<b>A 2</b>	<b>Emergency and alarm plan</b>	<b>12</b>
<b>A3</b>	<b>Jointly applicable documents</b>	<b>12</b>
	<i>Jointly applicable documents to the workshop and studio regulations are filed on the home page "Arbeiten in Werkstätten" and available as download.</i>	
<b>A 4</b>	<b>Table of safety officers, first aid assistants and fire protection assistants</b>	<b>13</b>
<b>A 5</b>	<b>Table of persons in charge</b>	<b>14</b>

### 3 Scope of application, miscellaneous

These general operating instructions for workshops and studios describe the dangers occurring for persons and the environment in a workshop / studio, specify the protective measures and rules of conduct generally necessary, give advice on specific risks and regulate hazardous materials handling.

They count as operating instructions in line with § 14 of the hazardous materials regulations (GefStoffV) and must take account of the risk assessment in line with the Occupational Safety Act (ArbschG) and GefStoffV.

Workshop and studio management in **Appendix A 1** must adapt and, if necessary expand them with indication of location and activity to workshop- and studio- specific positions and working procedures. Depending on workshop type, metal, wood and electrics studio etc. there may be a need for different regulations and provisions.

Jointly applicable documents, laws, ordinances, guidelines and information booklets on activity in workshops / studios and information on their sources are listed on the homepage of the labour and environmental protection group:

<http://www.uni-kassel.de/go/arbeit-werkstatt>

In addition to these general operating instructions for workshops and studios further operating instructions with material, workplace, mechanics and activity relevance are to be drawn up and observed. Particularly specific studio types, see above, may require specific operating instructions.

These workshop and studio regulations are binding on all employees and students at Kassel University working or lingering in workshops and studios and on visitors.

They must be made familiar to everybody working in workshops and studios, on display in the studios and workshop rooms with all the appendices and accessible at all times.

Directives from those persons entrusted with management of the workshops and studios and from hazardous materials officers as well as any advice from safety-at-work experts and safety officers, written directives, warning signs, prohibition signs and mandatory signs are to be observed.

Working and lingering in workshops and studios inclusive of their ante-rooms, e.g. stores and measuring rooms require approval from workshop and studio management. Purpose of use should be discussed with workshop and studio management before work begins.

The workshop and studio regulations should be updated in the context of instruction performed at least once a year and whenever there is a significant change in conditions or new insight (accidents, near-misses, etc.).

The following documents should be permanently visibly displayed in workshops and studios :

- The cover sheet of these workshop and studio regulations
- Part A of fire prevention regulations
- The emergency and alarm plan adapted to the respective circumstances (see Appendix A 2)

Information on safety at work, handling of hazardous materials, personal protective equipment etc. and the relevant legal principles are found on the homepage of the labour and environmental protection group. In case of questions you can refer to the staff members or experts on safety at work:

<http://www.uni-kassel.de/go/kontakt>

## 4 Responsibilities

Responsibilities for all activity in the workshops and studios at Kassel University are regulated in the “Guideline on organisation of labour, health and environmental protection at Kassel University (AGU Richtlinie)”. In line with this labour, health and environmental protection duties are incumbent upon all persons with disciplinary and leadership functions (professors, high-school lecturers, leaders of organisations, departments, workshops or studios). Responsibility in each case extends to the whole part management area and includes arranging all necessary measures such as drawing up risk assessments, arranging examinations by the works doctor and carrying out instructions.

In the case of central organisations in line with the above-mentioned AGU guideline the Dean, the Business Director or the organisation leader is responsible studio or workshop head. These persons can appoint deputy studio or workshop heads. Names and telephone numbers of workshop and studio management and deputies are to be entered on the cover sheet of these workshop and studio regulations.

The manager responsible for the workshop and studio can charge suitable skilled employees with individual tasks or “task packages” in writing. Transfer of duties can already be deduced from the employment contract, however irrespective of any delegation in place organisational, selection and control responsibility remains with the person in charge of the transfer.

Workshop and studio employees also bear responsibility within the tasks entrusted to them in the context of their personal decision-making and configuration options. They have the obligation according to their abilities and in line with instructions from the person in charge of the workshop or studio to ensure their own safety and health at work and safety and health protection for those affected by their dealings or failure to act.

Information on responsibilities in labour and environmental protection can be found on the following homepage:

<http://www.uni-kassel.de/go/agu-responsibility>

## 5 Risks to persons and environment

Apart from mechanical, electrical, physical, biological and thermal risks and those posed by hazardous materials, depending on the type of studio or workshop, fire and explosion dangers arise for users.

In the sense of the ordinance on protection against hazardous materials (hazardous materials ordinance - GefStoffV) solid, liquid and gaseous materials, inclusive of mixtures and solutions (so-called preparations) are deemed to be hazardous materials if they pose

- Explosion and/or fire risk
- A direct or indirect compromise to the health of the person
- A risk to the environment

Intake of materials into the human body may take place through inhalation, absorption through skin and mucous membranes or swallowing. They may have sensitisation and toxic effects and cause illness. During many activities normally practiced in workshops and studios, dust and vapour may be caused and give rise to effects on the person and illness.

## 7 Conduct in case of danger

Improper handling, storage and disposal of hazardous materials may cause them to leak into the environment and cause damage.

Those handling such materials should be informed about their properties, effects and applicable protective measures, along with conduct in case of danger and possible first-aid-measures. They should additionally know how proper disposal should be performed.

## 6 Protective measures and rules of conduct

**Every workshop and studio user should conduct himself in such a way that he does not endanger himself or others!**

### 6.1 Instruction

Before beginning activity in workshops and studios leaders and representatives should instruct employees, doctoral students, students, apprentices and trainees as well as cleaners, caretaking employees and technicians in detail and with reference to the relevant issues on general and activity-related dangers in the workshop and studio and on measures for their prevention both verbally and in job-related form.

Instruction must be performed before first workshop and studio use and then at least once per year.

The responsibility of workshop and studio management is to familiarise users with the contents of these workshop and studio regulations (general operating instructions), operating instructions for machines and activities, hazardous materials, Kassel University Fire Prevention Regulations and the emergency and alarm plan.

These instructions should be documented in writing with the following details: contents and subjects (main points) time and duration of instruction, signature of those receiving instructions (confirmation) and name of instructor.

### 6.2 Emergency provisions

All employees and students should be instructed in locations of the following emergency provisions and their functions:

- Provisions for first aid such as first-aid boxes, first-aid logs and defibrillators
- Emergency shutdown provisions for electricity (emergency-off switches), water and gas. Following an emergency shutdown workshop and studio management or supervisor should be informed immediately.
- Resources for fire-fighting such as fire extinguishers, wall hydrants, extinguishing blankets, extinguishing sand and manual call points
- Emergency exits, escape routes and assembly points
- Location of emergency sets for liquid leakage (binding material, metal shovels, brooms and perhaps protective masks)
- Special emergency provisions for special work places like emergency body and eye showers

No emergency provisions should be moved or obstructed. They should be kept easily recognisable and freely accessible, and they may not be disabled.

Fire extinguishers should be refilled after every use. In this case please refer to the Service Desk Buildings, Tel. -7777.

The contents of first-aid-boxes should be checked regularly for completeness and, if necessary, should be topped up (see list of persons in charge in Appendix A 5).

Fire prevention doors should be kept closed, and closing mechanisms should not be blocked with wedges etc.

Defects and damage to emergency provisions should be reported immediately to workshop and studio management.

Emergency provisions should be checked for appropriateness at regular intervals.

Emergency body and eye showers and safety cabinets should be checked monthly by workshop and studio staff (see list of persons in charge in Appendix A 5).

### **6.3 Tools, machines and equipment**

Tools, machines and equipment are to be used in line with the respective operating instructions and checked visually before use for external damage. Defective and damaged devices should no longer be used and should immediately be reported to workshop and studio management.

Repairs to machines and electric devices should only be carried out by trained technicians. Protective equipment such as dust or welding smoke extractors, insulation on live parts and covers on rotating parts should not be removed.

Servicing, maintenance and repair work are only permitted after consultation with workshop and studio management in the mutual avoidance of risk. In these activities the machine must be secured against inadvertent start-up.

Intervention in electricity, water and gas supply facilities and relative repairs to devices should only be carried out by authorised persons with relevant specialist knowledge.

Workshop and studio management should monitor the observation of dates for recurrent tests and arrange tests.

### **6.4 Handling of hazardous materials**

Activities involving hazardous materials should only be undertaken after risk assessment and adoption of the necessary protective measures.

Generally it is appropriate to check whether a less dangerous material is suitable for the purpose.

Specific dangers identified (R clauses, H clauses and EUH clauses) and safety recommendations (S clauses and P clauses) are binding as integral parts of these general workshop and studio regulations.

Inhalation of dust and vapour and contact of hazardous materials with skin and eyes should be strictly avoided.

Order and cleanliness in the work place are the responsibility of users themselves. Cleaning of work benches, machines and other items and disposal of any waste (shavings, dust etc.) are to be carried out by users themselves at the end of a work procedure, section or day. Any liquids spilt (oil, grease etc.) should be mopped up immediately (emergency-kit) and disposed of properly.

Eating, drinking and smoking in workshop and studio are forbidden. Food should not be kept in studio or workshop.

Those with abilities compromised by alcohol, drugs or medication are not allowed to work in workshop and studio or enter studio or workshop.

### 6.5 Retention, storage and transportation of hazardous materials

All containers for hazardous materials in workshops and studios must be properly marked.

A record of the hazardous materials available and used should be kept and updated for each work area inclusive of store rooms. One possibility for this at Kassel University is the **hazardous materials register system CLAKS**, in which all hazardous materials available in workshops and studios can be recorded. Requisite labels for marking the containers with danger pictograms and advice can be produced with CLAKS. <http://www.uni-kassel.de/go/claks-info>

Hazardous materials should not be stored or retained in containers likely to be mistaken for food items.

Hazardous materials should not be stored in workshops or studios, and supplies should be limited to the amount necessary for the work at hand. Particular attention should be paid to limiting the quantity of inflammable liquids in workshops and studios to the absolute minimum. Inflammable liquids with flashpoint below 60°C for use in the hand should only be kept in containers of maximum 1 litre nominal volume with total quantity per workshop and studio not exceeding 10 litres. If the work calls for larger quantities, these should be kept in a safety cabinet.

Hazardous materials kept in workshops and studios should be checked at least once per year for proper condition. Any hazardous materials no longer needed or now unusable should be properly disposed of.

Transportation of hazardous materials and other substances should be performed with suitable accessories (e.g. lorries for transporting gas cylinders).

Toxic materials should be stored under lock or such that only competent persons or their agents have access to them. Workshop and studio employees should be instructed before use on the specific dangers of the materials.

### 6.6 Pressurised gas cylinders:

As a matter of principle the smallest possible cylinders should be used with their number limited to the quantity required.

Storage of pressurised gas cylinders in workshops and studios is not permitted.

Pressurised gas cylinders should be secured against toppling over on site with a steel shackle or a chain. Restraints in the upper third of the canister should not impinge on the valve.

Pressurised gases should be taken from connection points firmly fixed at the workplaces. If this is not possible, pressurised gas cylinders may only be used with approval from workshop and studio management.

Pressurised gas cylinders should be housed in insulated safety cabinets and returned to the store after work is finished.

Pressurised gas cylinders should be returned to the store or housed in insulated safety cabinets after work is finished.

Pressurised gas cylinders should only be transported with tight protective valve covers in special lorries. Carrying cylinders is not permitted. Transportation in lifts together with persons is not permitted.

If pressurised gas cylinder valves cannot be opened by hand, they are to be returned to store or supplier. The use of pincers or other tools is not permitted.

Clothing should not be cleaned with compressed air, oxygen or other pressurised gases.

### 6.7 Personal protection equipment (PSA)

All personal protection equipment (PSA) required for each procedure is to be worn (goggles and ear protectors, gloves, protective clothing, etc.). Information on this can be found in the respective operating instructions.

You should only wear suitable footwear (if necessary with toe protection cap and puncture-resistant soles).

During work in workshops and studios suitable clothing is to be worn, and particularly when working on machines, tight-fitting clothing is important. Jewellery items such as rings and chains should be taken off and long hair should be tied suitably in an effort to ensure a risk-free work environment.

Skin protection, cleaning and care creams should be used in line with skin protection plan displayed.

### 6.8 Regulations on working time, ban on working alone

Normally work is only permitted by at least two persons in workshops and studios, and after consultation it might be necessary for another person to be nearby.

In the context of risk assessment it can be investigated whether due to the type of activity (none or only slight risk) or through additional technical and organisational measures working alone can be permitted, though if working alone is not sufficiently safe, it is not approved.

Normally trainees should only work under supervision.

### 6.9 Mother protection, youth protection

Employment of expectant and lactating mothers at Kassel University is only possible after individual case assessment (risk assessment) with reference to group VC work and environmental protection and perhaps with intervention by the work doctor and safety-at-work experts. For information see “plan of procedure for reporting a pregnancy” at: <http://www.uni-kassel.de/go/mutterprotection>

Women of childbearing age and expectant and lactating mothers are subject to bans and restrictions on employment that involves lifting and carrying, working under forced postures and handling hazardous materials. Thus the workshop and studio management responsible should immediately be informed about pregnancy.

Youths should only handle certain hazardous materials under certain conditions and under supervision of a competent person (see youth work protection legislation - JArbSchG).

### 6.10 Medical provision at work

All employees are entitled to medical provision at work. Whether and to what extent compulsory or voluntary treatment is to be performed can be found in “assessment form for medical provision at work”.

If the assessment form calls for **compulsory treatment**, employees may only continue to work, if they have been examined by a doctor and there is certification from the work doctor. If the assessment form calls for **voluntary treatment**, this should be offered to the employees. **Desired treatment** may be facilitated for justified activities.

Information at: [http://www.uni-kassel.de/go/arbeitsmedizinische\\_vorsorge](http://www.uni-kassel.de/go/arbeitsmedizinische_vorsorge)

### 6.11 Staff external to workshop and studio

Cleaners should only work if they have been instructed on workshop and studio dangers by workshop and studio management or authorised persons. Instruction is to be performed in understandable form and language, repeated frequently and documented.

Studio and workshop-specific waste of all types should not be disposed of by cleaning staff.

Workmen are to be instructed on possible specific dangers and sufficiently supervised, with instruction being documented.

## 7 Conduct in case of danger

### 7.1 Miscellaneous

- Keep the calm and avoid rash acts!
- Personal protection takes precedence over property protection.
- Warn anybody in danger or demand they leave the room. Observe first-aid principles. Working machines should be switched off, as should gas, electricity and perhaps water (cooling water and protective gas supply may need to be left on).
- Call emergency 112 and 2222 if necessary.
- Inform workshop and studio management and/or another responsible person
- Serious accidents should be reported by workshop and studio management or helper immediately by telephone by calling 2222 (University internal emergency call) after alerting ambulance and fire services on 112 (Note: Serious accidents are defined for instance as fires or release of large quantities of hazardous materials, explosion, bursting of pressurised containers and the failure of crane components).
- In the wake of serious accidents before arrival of the ambulance and/or police changes should only be made to the scene of the accident to prevent further injury to injured people and greater property damage.
- Consult specific details in the operating instructions
- In case of injury, malaise or skin reactions an ambulance should be called and a doctor visited immediately - even if first aid has been administered (for accident insurance doctors see emergency and alarm plan).
- In case of accidents with hazardous materials, information for the ambulance and doctor is to be secured. If appropriate, ambulance and doctor should be given details on hazardous materials taken from the safety data sheet, individual operating instructions or container label.
- Advice on first-aid measures see chapter 8.

### 7.2 Fire:

If a fire breaks out proceed as in regulations laid out in the [Kassel University Fire Prevention Regulations](#).

### 7.3 Leakage of dangerous gases:

If possible close valves and/or, if possible without injury, ensure good ventilation. If gases are inflammable, prevent sources of ignition and do not use electric switches.

### 7.4 Leakage of dangerous liquids:

Liquids should be mopped up with suitable binding material (emergency kit). Binding material and emergency kits are available in room ..... Such liquids should be disposed of (see chapter 9).

## 8 Principles of first-aid

### 7.5 With inflammable liquids:

Prevent sources of ignition and do not use electric switches, ensure good ventilation, if possible without injury. Use suitable suction or binding material to mop up (emergency set), take into the open or use tightly-closed containers and inform superior. Such liquids should be disposed of.

### 7.6 With corrosive liquids:

Ventilate well, use suitable binding material to mop up and inform superiors. Such liquids should be disposed of.

## 8 Principles of first-aid

### 8.1 Miscellaneous

- As soon as possible an emergency call should be made to 112. In all assistance services pay attention to personal safety. For further emergency numbers, advice for first responders and first-aid material see emergency and alarm plan.
- Remove persons from the danger area and take to fresh air. Always pay attention to personal protection (protective gloves, breathing protection).
- Extinguish clothing fires with fire extinguishers or, if available, body emergency showers. Perhaps also wrap in blankets or non-flammable clothing or roll affected person on the ground. Cool burns with water. Cover fire injuries to keep bacteria-free.
- Enlist first responders for support.
- In contamination with chemicals: Remove wet clothing, if necessary all clothing. If necessary use emergency shower. Clean undamaged skin with water.
- In case of acid burns eyes should be rinsed from inside (nasal bridge) to outside with eyelid forced apart for at least 10 minutes or longer with running water or, if available, with a mobile eye wash. Visit eye specialist.
- Check and monitor breathing and circulation.
- If appropriate a conscious patient should be placed in shock position by positioning objects under the legs (gradient 20-30°).
- If patient is unconscious but breathing place in a stable side position, otherwise stretch head, and when breathing starts, place in a stable side position. If patient is not breathing, free airways and keep free. Start cardiopulmonary resuscitation. Defibrillator should be fetched.
- Any bleeding should be staunched, bandages applied, single-use gloves should be used.
- Ambulance services (ambulance and perhaps emergency doctor) to be brought in and led to injured person. Do not leave injured person alone before ambulance arrives.
- Secure information on ambulance/doctor.
- All first-aid applied should be recorded in the first aid logbook. After the last entry in the log it should be kept for 5 years.
- In the case of less serious injury an accident insurance doctor is to be visited (accident insurance doctors see displayed emergency and alarm plan).
- Every injury should immediately be reported to workshop and studio management
- Following electricity accidents a doctor should always be visited.

## 9 Correct disposal

### 8.2 Accident reporting

**Accidents involving students** resulting in medical treatment or work incapacity of more than three days should be reported to the student authorities within three days, tel. 804-2800. The student authorities draw up the accident declaration and pass it on to Hessen accident insurers.

**Accidents involving employees** resulting in medical treatment or work incapacity of more than three days should be reported within three days with a draft accident declaration to the HR department of Kassel University. The accident declaration must not be signed. HR department passes the accident declaration to the necessary recipients (accident insurers, VC group, experts for safety at work, etc.). Accident declarations for employees and officers on the intranet: <http://www.uni-kassel.de/go/unfallanzeige>

## 9 Correct disposal

In line with regulations of the respective studio waste is to be separated and disposed of (e.g. metal / wood shavings, old oil, cooling lubricants, old paper and glass, organic waste, packaging and other waste etc.).

Dangerous waste such as oil, oil-soaked cloths, cooling lubricants, solvents and dyes are to be collected in suitable, closed, clearly marked containers and disposed of by the chemical waste store. Every delivery of dangerous waste requires a disposal application in writing.

Counterpart: Mrs Ebert, tel. 804-3812. Further information and application forms can be found at: <http://www.uni-kassel.de/go/entsorgung>

Dangerous goods and dangerous waste, see above, should under no circumstances be disposed of in sewage or domestic waste. If inadvertently hazardous materials leak into the sewer, information should immediately be given to workshop and studio management and the Service Desk Building, tel. 7777.

The following are barred from acceptance by the store for chemical waste:

- Unknown or undeclared waste
- Explosive substances (ammunition, explosives etc.)
- Radioactive contaminated waste
- Infectious waste
- Fire extinguishers and fire extinguishing powder
- Gas cylinders

Polluted broken glass is to be disposed of as dangerous waste by employees along with hazardous materials by using the appropriate waste containers.

Quantities of used and stored hazardous materials like lubricants, solvents, dyes and adhesives are to be limited to the smallest possible proportions. This principle applies: "Reuse before disposal".

## 10 Taking effect

These workshop and studio regulations take effect on the day after publication in the newsletter of Kassel University.

**Kassel, January 2015**

KASSEL UNIVERSITY

- THE PRESIDENT -

Signed 22.01.2016

(Dr. Reiner Finkeldey)

## Appendix

### Appendix A 1 Special regulations for the work area

*These general workshop and studio regulations should if necessary be supplemented by documents shown in Appendix A that are specific to individual studio types such as metal, wood and electrics! Otherwise please mark "not applicable".*

### Appendix A 2 Emergency and alarm plan

*Forms on the homepage of safety at work and environmental protection group:*

[www.uni-kassel.de/go/notfallorganisation](http://www.uni-kassel.de/go/notfallorganisation)

### Appendix A 3 Jointly applicable documents

*Jointly applicable documents to the workshop and studio regulations are filed on the home page "Working in the studio" and available as download.*

<http://www.uni-kassel.de/go/Werkstatt-und-Atelierordnung>

- Emergency and alarm plan for Kassel University
- Kassel University fire prevention regulations
- Principles of prevention (DGUV provisions 1, previously BGV A1)
- Dangerous goods ordinance (GefStoffV) and technical rules for hazardous materials (TRGS)
- Dangerous goods in studios (DGUV Information 213-033, previously BGI/GUV-I 8625)
- Industrial Safety Regulation (BetrSichV)
- Youth protection legislation (JuSchG)
- Risk/load catalogue: Metal processing, general (DGUV information 211-033, previously GUV-I 8702)
- Risk/load catalogue: wood processing (DGUV information 211-034, previously GUV-I 8717)
- Electric units and operating substances (DGUV provision 4, previously GUV-V A3)
- Floors in work rooms and areas with risk of slipping (DGUV regulation 108-004)

Appendix

**Appendix A 4      Safety officers, first aid assistants, fire prevention assistants**

<b>Safety officers</b>	<b>Room no.</b>	<b>Telephone no.</b>

<b>First aid assistants</b>	<b>Room no.</b>	<b>Telephone no.</b>

<b>Fire prevention assistants</b>	<b>Room no.</b>	<b>Telephone no.</b>

Appendix

**Appendix A 5      Persons in charge**

<b>Persons in charge of:</b>	<b>Name</b>	<b>Room no.</b>	<b>Telephone no.</b>
<b>Checking cooling lubricants</b>			
<b>Checking first aid boxes</b>			
<b>Checking</b>			
<b>Checking</b>			
<b>Checking</b>			
<b>Checking</b>			
<b>Checking</b>			