

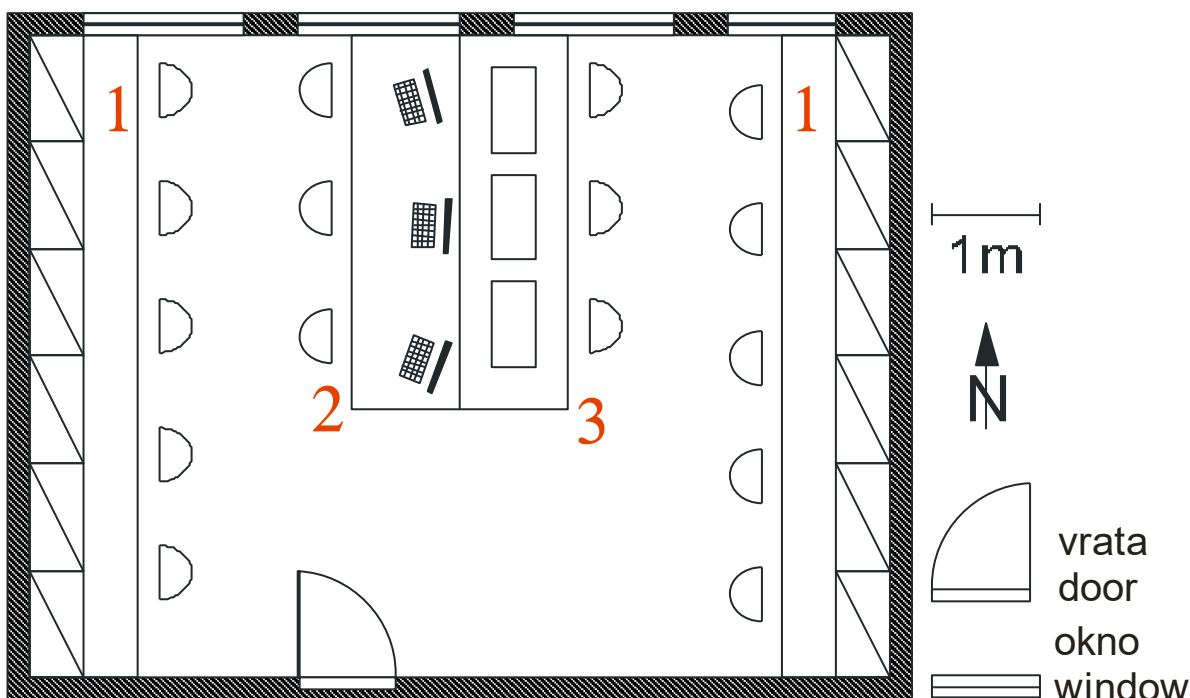
# Projektna naloga

za izpit pri predmetu Svetlobna tehnika

Izdelajte projekt razsvetljave kemijskega laboratorija.

## Opis prostora:

- velikost prostora: dolžina: 8 m, širina: 6 m, višina: 3 m;
- odsevnosti: strop: 0,7, stene: 0,7, tla: 0,5;
- prostor je namenjen izvajanju kemijskih preiskav;
- strop bo izveden kot spuščen strop, nad njim je prostor za ožičenje svetilk;
- okvirni razpored pohištva in druge opreme je viden iz tlorisa;
- če ni drugače navedeno, upoštevajte standardno višino in dimenzije pohištva;



**Tloris prostora** z okvirno razporeditvijo pohištva in ostale opreme. Oznake pomenijo:

1. Delovni pult s stoli, višina pulta: 110 cm, nad pultom omarice: višina spodnjega robu 175 cm, višina omaric 80 cm;
2. mize z računalniki, višina 75 cm;
3. mize z opremo za kemijsko analizo, višina 75 cm

## Projekt naj obsega:

- tehnično poročilo
- izpis rezultatov izračunov kot prilogo

Tehnično poročilo mora vsebovati:

- kratek opis prostora;
- navedbo splošnih zahtev za razsvetljavo delovnih mest v prostoru;

- opis delovnih mest z navedbo ustrezne osvetljenosti in ostalih relevantnih parametrov;
- navedbo in utemeljitev izbranega koncepta in vrste razsvetljave;
- navedbo in utemeljitev izbranih svetlobnih virov;
- navedbo in utemeljitev izbranih svetilk;
- prikaz osnovnih podatkov o prostoru in izbranih svetilkah ter virih;
- navedbo in kratek komentar glavnih rezultatov;
- navodila za vzdrževanje razsvetljave;
- navedbo upoštevanih dokumentov.

Priloga tehničnega poročila (izpis iz programa s katerim ste izvedli izračune) mora vsebovati vse relevantne podatke iz katerih je mogoče oceniti ustreznost projekta in njegovo skladnost z zahtevami standarda in drugih regulativnih dokumentov (npr. tehničnih smernic).

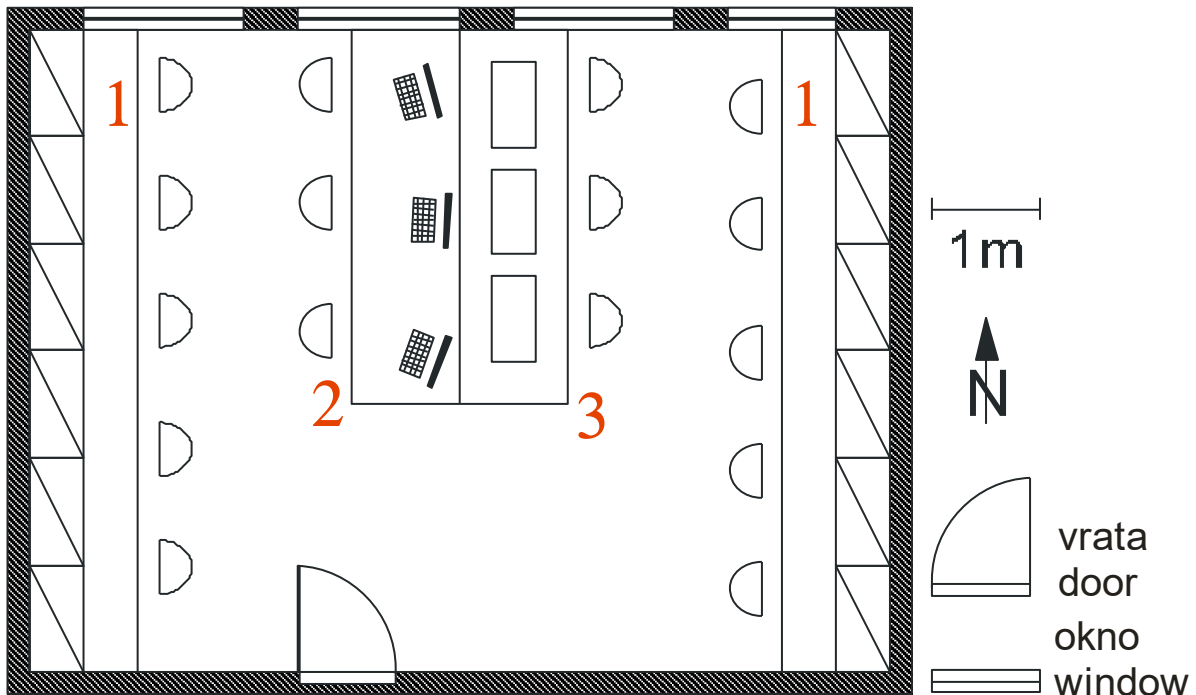
# Project task

in the subject Lighting Engineering

## Design lighting of chemical laboratory.

### Description of the room:

- Size of the room: length: 6 m, width: 4 m, height: 3 m.
- Reflections of surfaces: ceiling: 0.7, wall: 0.7, floor: 0.2.
- Laboratory is intended for carrying out chemical analysis.
- Ceiling is designed as a suspended ceiling; there is space for wiring about it.
- The basic design and arrangement of furniture and other equipment is visible on the ground plan below;
- If not stated otherwise, consider the standard height and dimensions of the furniture;



**Ground plan** of a room with basic arrangement of furniture and other equipment. Noted with numbers are:

1. Work counter with chairs, height of the counter: 110 cm, cabinets above the counter: height of lower edge 175 cm, height of cabinets 80 cm;
2. tables with computers, height 75 cm;
3. tables with equipment for chemical analysis, height of 75 cm

### Project should include:

- Technical report.
- Printed results of calculations as an attachment.

Technical report must include:

- Brief description of the room.
- List of general requirements for lighting in the room.
- List of "workplaces" in the room with description of the appropriate lighting and other relevant parameters.
- Description and justification of the chosen concept and type of lighting.
- Description and justification of the selected light sources.
- Description and justification of the selected luminaires.
- Basic information about the room and selected light sources and luminaires.
- Main results with short discussion.
- Instructions for maintenance of the lighting.
- References.

Attachment of the technical report (print from the calculation program - DIALux) must contain all relevant information needed for evaluation of the project and its compliance with the requirements from the standards and other regulatory documents (e.g. technical guidelines).