

Geometry at Fine Arts and Design Faculties

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i2ADS - Research Institute in Art, Design and Society / Faculty of Fine Arts of the
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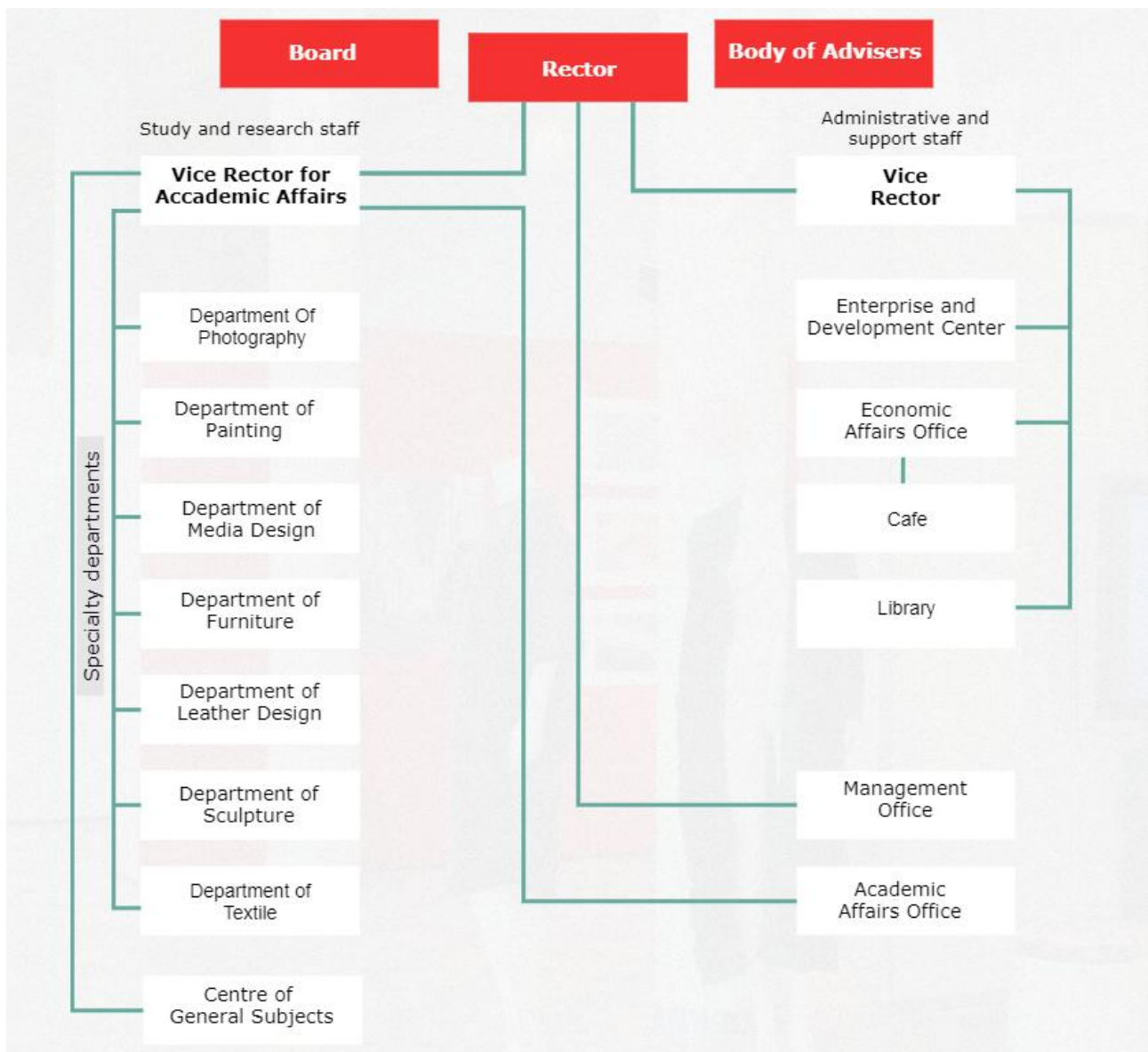


Geometry and Perspective as the Fundamentals of Drawing

Tartu Art College (TAC) is the institution of higher education in the field of applied arts in Estonia. TAC offers seven curricula in the three fields of design, conservation/restoration and the arts: photography, painting and wall painting's restoration, media and advertisement design, furniture and restoration, leather design and restoration, sculpture and textile.

TAC's vision: TAC is an ethical, open and consistent institution of higher education that encourages innovative thinking.

Structure of Tartu Art College



Tartu Art College has four years of study to obtain a diploma. A diploma is equivalent to a 3-year BA (Bachelor of Arts/baccalaureus artium). The extended period gives students more opportunities to practice their technical skills.

After graduation the students are ready to start their own business or if they wish, they will be able to pursue Master's studies at European universities.

Centre of General Subjects

The general studies center incorporates courses taught in all fields under the common core module and the common electives module, as well as their faculty. The purpose of the general studies center is to provide students with high quality and diverse grounding in art education, integrating it with education in the students home departments.

***Theoretical core courses** in art history, history and philosophy of the visual environment, and the principles of entrepreneurship and cultural management. practical English, basics of written research, design and conservation*

***Practical core courses** in drawing, painting, sculpture, composition, color theory, digital design, and geometry develop representational skills, practical skills, technological skills as well as abstract thinking and analytical skills.*

Fundamentals of drawing

General drawing basics will take 2 academic years (4 semesters) and contains 3 ETCS per one semester (it is a total of 12 ETCS), and this program has 50% contact lessons and 50% independent work.

Aims of drawing studies for first year:

Provide for visual communication the necessary drawing skills and possibilities to solve various tasks.

I semester

Description:

- Geometrical forms and still-life
- Structure and composition
- Proportions and size
- Light and shadow
- Rules of perspective
- Different materials, facture and texture
- Sketches of objects

Study outcome:

Upon completion of the course, students will:

- know how apply the compositional principles of a drawing;
- be able to draw geometrical forms, objects and still-lives, with the shapes, size and material of objects;
- be able to draw proportions, form and perspective as much as possible, with the use of light and shadow and considering integrity (distinction between essential/non-essential);
- make short-term sketches of different objects;
- know how to use graphite pencils of different grades and other graphic materials (charcoal, sanguine, pastel, sepia)

II semester

Description:

- Wire head, plaster cast angular (geometrical) head, plaster cast head and human head.
- Hands and feet.
- Objects and settings
- Light/shadow and lightness/darkness.
- Rules of anatomy, proportions and perspective.
- Sketching.
- Drawing techniques and materials.

Study outcome:

Upon completion of the course, students will:

- be able to compose a plaster cast angular head and a wire head
- be able to draw a plaster cast and human head, hands and feet with the rules of proportion and anatomy;
- be able to convey forms, using light and shades and taking into account integrity (distinction between the essential/non-essential);
- know the principles of using rules of perspective;
- draw quickly the characteristic portrait in sketching;
- know how to use graphite pencils in different grades and other drawing media (charcoal, sanguine, pastel, sepia), and employ different drawing techniques

Students of Tartu Art College come from South Estonia, where there are no many opportunities for learning basic art skills, before they come to college. Our students prefer traditional drawing, so that they have more time to think about it and practice drawing classical techniques. They want to get a base to express their original creative ideas in a clear and concrete way. In addition to traditional drawing, there are also separate lessons for quick sketching.

First of all, we teach them the traditional drawing of nature. It is mainly a technical drawing, to obtain the basic skills. Some creative tasks like drawings in geometric/cubist style are added as an independent work. Each semester the students have a new teacher. This requires strong co-operation and the matching of learning objectives between teachers.

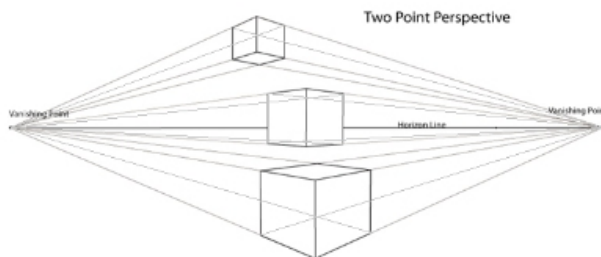
We start drawing at the cube and perspective. It seems easy, but it is not. After that students draw much more seriously. The general curriculum also includes lectures „Art and Geometry” by the other lecturer, but the first knowledge about the perspective comes from me.

I made a simple learning sheet myself - ten simple sentences about the perspective with the example of a cube. Mostly I write there about the horizon and its location. I know that it is the first important thing to understand. I avoid mathematical terms, because artists usually don't have a mathematical background. Creativity is an original and innovative thinking outside of systems!

Basics of the Perspective for drawing

(a two-point perspective so-called the "Painters Method")

1. A perspective drawing is an illusion: spatial (3D) impression on a 2D-paper or other surface.
2. Defining the horizons: the horizon is an imaginary line at eye level, when looking into the distance. In nature, this line appears between the sea and the sky.
3. Placement of horizon on the paper depends on the composition and the size of what is being drawn.
4. Horizontal parallels meet in imaginary focus points on the horizon.
5. All focus points lie on the same horizon.
6. Vertical parallels do not meet, they are parallel to the vertical edge of the paper.
7. Equal dimensions in reality, gradually decrease into the depth of the image.
8. Horizontal surfaces, which are closer to the horizon, are narrower than those that are farther.
9. Circle in perspective is an ellipse - it has no angles.
10. Into the depth of the picture, the dark surfaces get brighter and bright surfaces get darker - until everything seems equally gray.



The ability to draw a perspective helps to:

- * visualize surroundings realistically
- * visualize imaginary objects and items
- * portray people in complex poses and from difficult viewpoints.

NB! Perspective drawing often means finding a compromise between theory and reality.

Written by Eve Eesmaa

The second task is with basic geometric forms: sphere, cylinder, cube - this is a drawing with gray shades. The following drawings need to have more longer light and darkness scale: black - white and many different gray nuances between them. The goal is to achieve greater spatial illusion.

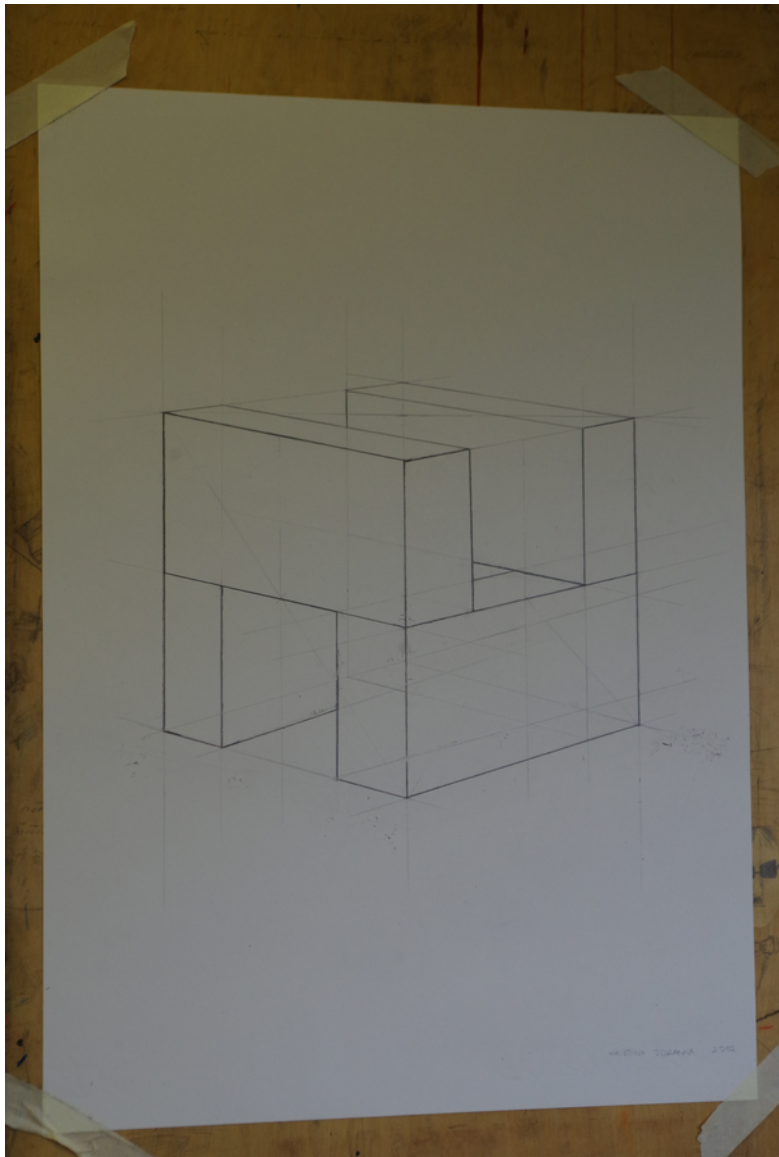
Students will be helped by the methodology to analyze their own work: if students are placed near each other, then the drawings of original still life from their point of view should look similar.

Specialist teachers from multiple departments teach professional creative drawing: fashion sketches, furniture sketches, illustrations, comics, creative drawing, drawing-based printmake techniques, croquis...

But a picture is worth a thousand words :)

Practical lectures





First year exam - I semester



First year exam - II semester:





Thank you for your attention!

Eve Eesmaa



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