



Institute of Painting and Artistic Education

summer semester:

Module I Module I: Art, Science and Education

| Krakow as the Challenge for Art Based Research | |
|---|---------|
| Introduction to Urban Photography | |
| Neuroaesthetics: Neuronal Basis for Art Creation and Perception | 30 ECTS |
| Sculpture | |
| Basics of Science-based Art. | |





| Course title | Krakow as the Challenge for Art Based Research | | | | |
|--------------------------|--|------|---|--|--|
| Semester (winter/summer) | Summer | ECTS | 6 | | |
| Lecturer(s) | Rafal Solewski, associate professor | | | | |
| Department | Institute of Painting and Art Education | | | | |

Course objectives (learning outcomes)

The first aim of the classes is to familiarize students with the most important information about the history and art of Krakow and its multiculturalism. In the further part of the course, Krakow and its culture are indicated as a possible artistic and research challenge. In this context, the aim of the seminar part of the course is to indicate research challenges that appear in one's own artistic practice and compare them with Krakow's context and contemporary art.

Prerequisites

| Knowledge | Elementary Art History |
|-------------------|------------------------|
| Skills | - |
| Courses completed | - |

| Course organization | | | | | | | | |
|---------------------|---------------------------|-----------------|-----------------|---------|----------------|----------------|-------------|--|
| Form of classes | rm of classes W (Lecture) | Group type | | | | | | |
| 1 of the classes | | A (large group) | K (small group) | L (Lab) | S (Seminar) | P (Project) | E (Exam) | |
| Contact hours | | | | | 15 | | | |

Teaching methods:

Seminar illustrated with a Power Point presentation





Assessment methods:

| E – learning | Didactic games | Classes in schools | Field classes | Laboratory tasks | Individual project | Group project | Discussion participation | Student s presentation | Written assignment (essay) | Oral exam | Written exam | Other |
|--------------|----------------|--------------------|---------------|---------------------|-----------------------|---------------|--------------------------|---------------------------|----------------------------|-----------|--------------|-------|
| | | | | | | | | | | | | × |

Assessment criteria

Credit based on attendance

Course content (topic list)

- 1. Krakow in Middle Ages: Great Moravia, Baptism of Poland, Capital, Location, German Colonization. Jews in Krakow. Casimir the Great and the Krakow Academy
- 2. Jagiellonian Monarchy: Renaissance, Italian Artists and the Golden Age. Krakow Baroque. Loss of Capital City. The Swedish Deluge
- 3. Krakow during the Partitions of Poland. Duchy of Krakow. Galicia, fortress and the Habsburg Monarchy. Czartoryski Collection. Academy of Fine Arts
- 4. Krakow in the 20th Century. German Occupation, Nowa Huta, Times of Transformation: development or monuments?
- 5. The genesis of the concept of transdisciplinarity and the relationship between art-based research and critical art. Sociological, psychological, communicative, cognitive, physical, empirical, biological orientations in possible context of Krakow
- 6. Presentation of one's own artistic projects. comparison, discussion
- 7, Presentation of one's own artistic projects. comparison, discussion
- 8. Presentation of projects enriched with new theoretical materials

Compulsory reading

- 1. Scott Simpson, Krakow. 2003
- 2. Dorota Wasik, Emma Roper-Evans, Krakow, 2002
- 3. Susan Finley, *Critical Arts-Based Inquiry: Performances of Resistance Politics*, Sage Handbook of Qualitative Research, ed.Norman K. Denzin & Yvonna S. Lincoln, 2017, pp. 561-575
- 4. Elliot W. Eisner, On the Differences Between Scientific and Artistic Approaches to Qualitative Research, "Review of Research in Visual Arts Education" 13 (1981), pp. 1-9

Recommended reading

- 1. Tadeusz Dobrowolski, Sztuka Krakowa, any edition
- 2. Zofia Małkowicz, Nie tylko art and science: czyli jak myśleć o praktykach łączących sztukę i naukę? Propozycja nowej typologii, January 2017Kultura i Społeczeństwo 61(1), pp.175-190





| Course title | Basics of Science-based Art | | | | |
|--------------------------|---|------|---|--|--|
| Semester (winter/summer) | Summer | ECTS | 6 | | |
| Lecturer(s) | Tomasz Padło | | | | |
| Department | Institute of Painting and Art Education | | | | |

Course objectives (learning outcomes)

The aim of the classes is to implement artistic projects based on empirical knowledge from various scientific disciplines. The completed individual projects are presented and then discussed in the group. This is to sensitize students to criticism based on other points of view and to present the advantages of group work.

Prerequisites

| Knowledge | Basic knowledge of contemporary art |
|-------------------|-------------------------------------|
| Skills | - |
| Courses completed | - |

| | Course organization | | | | | | | |
|---|---------------------|-------------|-----------------|-----------------|---------|----------------|----------------|-------------|
| F | form of classes | W (Lecture) | Group type | | | | | |
| 1 | Form of classes | | A (large group) | K (small group) | L (Lab) | S (Seminar) | P (Project) | E (Exam) |
| (| Contact hours | | | 8 | | | 7 | |

Teaching methods:

Classes are held in the form of a discussion based on an introduction to a specific problem and presentation of the work completed.





Assessment methods:

| E – learning | Didactic games | Classes in schools | Field classes | Laboratory tasks | Individual project | Group project | Discussion participation | Student s presentation | Written assignment (essay) | Oral exam | Written exam | Other |
|--------------|----------------|--------------------|---------------|------------------|-----------------------|---------------|--------------------------|---------------------------|----------------------------|-----------|--------------|-------|
| | | × | | | × | | × | × | | | | |

| Assessment criteria | Students are obliged to actively participate in classes and complete the projects |
|---------------------|---|
| Comments | - |

Course content (topic list)

- 1. Theoretical assumptions of Science-based Art
- 2. Idea of visual identification based on in-depth analysis of the topic
- 3. Maps in art
- 4. Review of a selected exhibition
- 5. From idea to implementation the artistic process on selected examples

Compulsory reading

Adams, S., Morioka, N., & Stone, T. L. (2006). Logo design workbook: A hands-on guide to creating logos. Rockport Publishers.

Eccles, C. (2024). Uncertain outcomes: An exploration of the interaction between art and science (Doctoral dissertation, Institute of Art, Design+ Technology).

Harmon, K. A., & Clemans, G. (2009). Map As Art, The: Contemporary Artists Explore Cartography. Princeton Architectural Press.

Recommended reading





| Course title | Introduction to Urban Photography | | | | | |
|--------------------------|---|------|---|--|--|--|
| Semester (winter/summer) | Summer | ECTS | 6 | | | |
| Lecturer(s) | Tomasz Padło | | | | | |
| Department | Institute of Painting and Art Education | | | | | |

Course objectives (learning outcomes)

The aim of the course is to familiarize students with the basics of photographic composition and the use of photography of the urban spaces.

Prerequisites

| Knowledge | - |
|-------------------|--------------------------|
| Skills | Basics of using a camera |
| Courses completed | - |

| Course organization | | | | | | | | | | | |
|---------------------|-------------|-----------------|-----------------|---------|----------------|----------------|-------------|--|--|--|--|
| Form of classes | W (Lecture) | | Group type | | | | | | | | |
| | (Eccure) | A (large group) | K (small group) | L (Lab) | S (Seminar) | P (Project) | E (Exam) | | | | |
| Contact hours | | | 8 | | | 7 | | | | | |

Teaching methods:

Discussion, photography workshop in Krakow, preparation of a photographic project about Krakow

Assessment methods:

| E – learning | Didactic games | Classes in schools | Field classes | Laboratory tasks | Individual project | Group project | Discussion participation | Student s presentation | Written assignment (essay) | Oral exam | Written exam | Other |
|--------------|----------------|--------------------|---------------|---------------------|-----------------------|---------------|--------------------------|------------------------|----------------------------|-----------|--------------|-------|
| | | × | × | | × | | × | × | | | | |





Assessment criteria

Students are obliged to actively participate in classes and complete the final project

Comments

Course content (topic list)

- 1. Rules of composition in urban photography
- 2. Theory of urban photography
- 3. Preparation of a photographic project based on the discussed idea

Compulsory reading

Cornbill, T. (2019). Urban photography. Hachette UK.

Hunt, M. A. (2014). Urban photography/cultural geography: Spaces, objects, events. Geography Compass, 8(3), 151-168.

Scott, C. (2020). Street Photography: From Brassai to Cartier-Bresson. Routledge.

Recommended reading

Lange, S. (2006). Bernd and Hilla Becher: life and work. Meyerowitz, J. (2020). How I Make Photographs, Orion Publishing Shore, S., Schmidt-Wulffen, S., & Tillman, L. (2004). Stephen shore: Uncommon places: The complete works (p. 208). New York, NY: Aperture.





| Course title | Neuroaesthetics: Neuronal Basis for Art Creation and Perception | | | | | | | | | | | |
|--------------------------|---|------|---|--|--|--|--|--|--|--|--|--|
| Semester (winter/summer) | Summer | ECTS | 6 | | | | | | | | | |
| Lecturer(s) | Sebastian Stankiewicz, PhD | | | | | | | | | | | |
| Department | Institute of Painting and Art Education | | | | | | | | | | | |

Course objectives (learning outcomes)

The aim of the course is to advance and deepen knowledge of actual physiological basis of artistic, creative and perceptual processes, and thus to broaden awareness of one's own artistic practice

Prerequisites

| Knowledge | Elementary art history |
|-------------------|------------------------|
| Skills | |
| Courses completed | |

| Course organization | | | | | | | | | | | |
|---------------------|-------------|-----------------|-----------------|---------|----------------|----------------|-------------|--|--|--|--|
| Form of classes | W (Lecture) | | Group type | | | | | | | | |
| | W (Lecture) | A (large group) | K (small group) | L (Lab) | S (Seminar) | P (Project) | E (Exam) | | | | |
| Contact hours | | | 15 | | | | | | | | |

Teaching methods:

Power Point presentations, text reading, discussion of texts, and of chosen issues of artistic practice

Assessment methods:

| | E – learning | Didactic games | Classes in schools | Field classes | Laboratory tasks | Individual project | Group project | Discussion participation | Student s presentation | Written assignment (essay) | Oral exam | Written exam | Other |
|--|--------------|----------------|--------------------|---------------|---------------------|-----------------------|---------------|--------------------------|------------------------|----------------------------|-----------|--------------|-------|
| | | | | | | | | × | | | × | | |





Assessment criteria

Credit based on attendance, active participation in discussions, and oral exam

Comments

Course content (topic list)

- 1. Senses modalities and the idea of embodiment specifics of scientific outcomes vs. artistic practice
- 2. Visual modality artist as an unconscious nerobiologist, the myth of seeing, functional definition of art, conception of superstimulus
- 3. Aesthetics of straight and curved lines, simple geometric figures and solids, the coupling of colors
- 4. Unaware and aware vision vision for perception and vision for activity
- 5. Top-down and bottom-up directions of seeing trained seeing of artists and neuroplasticity
- 6. Idea of beauty neurologically revealed
- 7. Hapticity/tactility two aspects of the body
- 8. Creative processes based on the contept of deep understanding
- 9. Consciousness and self-consciousness as treshold of creativity (deep-learning of AI)
- 10. VR and XR as research tool by sensual deprivation

Compulsory reading

Beck H. (2017). Irren ist nützlich: Warum die Schwächen des Gehirns unsere Stärken sind, München: Carl Hanser Verlag

Johnson M. (2007). The Meaning of the Body. Th Aesthetics of Human Understanding, Chicago: University of Chicago Press

Livingstone, M. (2002). Vision and Art. The Biology of Seeing. Cambridge: The MIT Press

Mallgrave H.F. (2012). The Architect's Brain: Neuroscience, Creativity, and Architecture

Ramachandran V.S., Hirstein W (1999). *The Science of Art: a Neurological Theory of Aesthetic Experience*, "Journal of Consciousness Studies", 6 (6-7), 15-51.

Zeki S. (1999). Inner Vision. An Exploration of Art and the Brain, Oxford: Oxford University Press

Recommended reading

Zeki S. et al. (2014). *The experience of mathematical beauty and its neural correlates*, "Frontiers in Human Neuroscience", doi: 10.3389/fnhum.2014.00068

Ishizu T, Zeki S. (2011). *Toward A Brain-Based Theory of Beauty*, "PLoS ONE" 6(7): e21852, doi: 10.1371/journal.pone.0021852





| Course title | Sculpture | | |
|-----------------------------|--|------|---|
| Semester (winter/summer) | summer | ECTS | 6 |
| Lecturer(s) | dr Dorota Hadrian | | |
| Department | IMiEA/ Institute of Painting and Art Education | | |

Course objectives (learning outcomes)

The main educational goal of the classes in the Sculpture studio is to provoke activities in which students will freely conduct a sculptural project deepened by the conceptual aspect, based on plastic means of expression in three-dimensional space. The starting base of the exercises is the three-dimensionality of the form its structure and spatial construction. A very important element of the classes is the form of corrections, discussions, mini-lectures related to abstract spatial, three-dimensional thinking, aimed at stimulating creative creativity. Students are required to keep notebooks with sketches, notes of ideas, thoughts and impressions, emotions, documentation in various forms of media (sketch, photo, matter, video, etc.). Classes in the sculpture studio, in addition to the acquisition of manual skills, should also result in intellectual development and the acquisition of social awareness, and thus the formation of more mature artistic expressions.

Objectives of training

- To consolidate the plastic language in theoretical and practical aspects with emphasis on sculpture and space

(composition, form, solid, texture, openwork, weight, symmetry, asymmetry, harmony, contrast, tension)

- ability to use the above concepts in discussions and revisions
- ability to build structures for sculptural realizations
- getting acquainted with the sculpting technique by adding and subtracting material in clay
- practical learning of the technique of casting sculpture in plaster
- discussing other casting technologies
- developing manual skills and spatial thinking
- attempts to search for individual formal solutions
- ability to make independent decisions in artistic activities
- knowledge of sculpture materials and their specifications and artistic quality
- knowledge of the development of sculpture in art on the basis of sculptural realizations of the most outstanding artists.

Prerequisites

| Knowledge | basic knowledge of sculpture |
|-------------------|------------------------------|
| Skills | manual skills |
| Courses completed | Sculpture course |





| | | | Course organ | nization | | | | | | |
|-----------------|-------------|-----------------|-----------------|----------|----------------|----------------|-------------|--|--|--|
| Form of classes | W (Lastura) | | Group type | | | | | | | |
| | w (Lecture) | A (large group) | K (small group) | L (Lab) | S (Seminar) | P (Project) | E (Exam) | | | |
| Contact hours | | | 7 | | | 8 | | | | |

Teaching methods:

- individual corrections
- discussions
- presentations
- introduction to sculpture issues by discussing the specifics of sculpture using examples from the art world
- introducing technical issues related to sculpture before and during the exercise

Assessment methods:

| E – learning | Didactic games | Classes in schools | Field classes | Laboratory tasks | Individual project | Group project | Discussion participation | Student s presentation | Written assignment (essay) | Oral exam | Written exam | Other |
|--------------|----------------|--------------------|---------------|---------------------|--------------------|---------------|--------------------------|------------------------|----------------------------|-----------|--------------|-------|
| | | | | | × | | × | | | | | |

Assessment criteria

The implementation of the project is evaluated taking into account the student's involvement in the project, creative exploration, design and visual end result. The student's attendance in class and the level of independence in the activity are also taken into account.

Comments

Course content (topic list)

The program involves workshop exercises and implementation in selected material.

- 1. RELATIONSHIPS
- 2. ECCE HOMO
- 3. EVERYTHING AROUND MAKES ME ...





Compulsory reading

- 1. "Sculpture Today", Judith Colins, Phaidon 2014
- "Sculpture. From Antiquity to the Present Day" Taschen GmbH Koln 2006
 Zatańczą Ci, co drżeli. Polska sztuka krytyczna, Karol Sienkiewicz

Recommended reading