ZBRUSH FOR ANAPLASTOLOGY

Basic Course

6-8th November, Ostrava
ZBRUSH FOR ANAPLASTOLOGY OPENS NEW POSSIBILITIES
Introduction

ZBRUSH

Digital sculpting and 3D printing represent an option to standard manual procedures in Anaplastology.

ZBrush software is a powerful tool for digital sculpting of facial and somato prostheses.

COURSES

The courses are designed for anaplastologists who would like to introduce digital sculpting method into their clinical practice.

We organize 3-day courses for beginners (Basic Course) and for advanced users (Advanced Course).

COURSE LEADER

The course leader is Ales Grygar who is an experienced lecturer of Zbrush courses and also a Chief designer and Co-founder at Invent Medical.

Ales led Zbrush for Anaplastology courses and presentations at Hamburg (GER), Heidelberg (GER), Augusta (USA), Denver (USA), Rio de Janeiro (BRA) and Ostrava (CZE).

Ales specialises in application of modern processes and 3D digital technologies within the medical field, with special interest in anaplastology and design of 3D-printed orthoses, prostheses and implants.

Prior to his job at Invent Medical and ING corporation he worked as a designer in Valencia, Spain.
Basic Course
6-8th November 2017, Ostrava

TARGET AUDIENCE
Basic course is adjusted for maximum 6 beginner users who would like to use ZBrush for handling and sculpting 3D models.

WHAT WILL YOU NEED
- Own laptop computer (MAC or PC)
- Trial or full version of ZBrush 4R7 P3
- Graphic tablet Wacom Intuos PRO (Medium size recommended)
- Basic skills of working with graphic tablet
**Basic Course**

6-8 th November 2017, Ostrava

**WHAT WILL YOU LEARN**

- Segmentation and manipulation with CT and MRI data
- Import of scanned 3D models (from various scanners)
- Create mirrored copies and 3D print of master models
- Sculpt and adjust models in order to change their shape.
- Use boolean functions to create contact surfaces and fitting models
- Use transformation functions to create natural transitions
- Use detailing tools to create realistic details (pores, wrinkles, papilar lines)
- Use ZBrush for preoperative planning (implant positioning, visualization etc.)
- Create your own facial epithesis, septal obturator
- And more…
Course Package

**WHAT IS INCLUDED**

- Course fee (3 full days)
- Lunch and refreshment during the course
- Transfer from hotel to Invent Medical facility and back
- 1 social event - dinner
- The course is located in modern facility equipped with cutting-edge 3D scanning and 3D printing technology

**COURSE PACKAGE PRICE**

Total price of the course is **859 €**

Order your course by email at: hello@inventmedical.com

**Deadline is October 6th.**

However the number of participants is limited. We suggest registering your place sooner.
DRIVEN BY INNOVATION

Invent Medical is a high-tech medical company focused on research and development, advanced technologies and their clinical application.

We focus deeply on the synergy of cutting-edge technology with the human touch to produce the most personal wearables ever.

We are proudly based in Ostrava, Czech Republic. We cooperate with medical partners in 10 countries and our ambition is to reinvent the application of cutting-edge technology in medical field world-wide.

PROFESSIONALS IN ANAPLASTOLOGY

We are constantly looking for breakthrough technology and processes to be applied in Anaplastology to make the process of creating prostheses faster and more convenient.

We have won multiple awards in last years by International Anaplastology Association including the Award for the best clinical solution, DaVinci award and the Best presentation award.

Our mentors are people with long-time experience in Anaplastology and digital technologies.
The cheapest and most convenient way to get to Ostrava is by plane to nearby modern airports in Ostrava, Katowice or Krakow. The flights are frequent and the transportation from airport is included in the course package.

**OSTRAVA / KATOWICE / KRAKOW AIRPORT**

- **Ostrava airport - Ostrava**
  - Distance: 20 km
  - Driving time: 20 min

- **Katowice airport - Ostrava**
  - Distance: 110 km
  - Driving time: 1 hour

- **Krakow airport - Ostrava**
  - Distance: 160 km
  - Driving time: 2 hours
We are looking forward to seeing you in Ostrava!

www.zbrush4anaplastology.com
www.inventmedical.com

Order your course at: hello@inventmedical.com
# Zbrush for Anaplastology - Basic Course

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<th>DAY 2</th>
<th>DAY 3</th>
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<td>Welcome</td>
<td>Review skills from Day 2</td>
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<td>Digital technologies in Anaplastology - Introduction</td>
<td>Using deformation for changing shape of 3D scan (scale, mirror, etc)</td>
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<td>Design of Nasal Prostheses in Zbrush - Demonstration</td>
<td>Using InVesalius for CT segmentation</td>
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<td><strong>10.40 - 11.00</strong></td>
<td>Coffee break</td>
<td>Coffee break</td>
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<td>Importing different data types into ZBrush, subtools</td>
<td>Using trimming and selection brushes</td>
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<td>Manipulating data within brush, move, scale, rotate tools</td>
<td>Cutting the shape of a 3D scan</td>
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<td>Practical Case - positioning epithesis on top of a 3D scan</td>
<td>Practical case - manipulating and mirroring of an ear epithetic</td>
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<td><strong>12.40 - 13.20</strong></td>
<td>Lunch</td>
<td>Lunch</td>
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<td>Basic sculpting (Z-add, Z-sub, Z-intensity, DrawSize, Focal Shift)</td>
<td>Using the dynamesh function</td>
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<td>Brushes - description and application</td>
<td>Using boolean functions</td>
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<td>Practical case - modifying shape of an epithetic</td>
<td>Practical case - creating contact surface for the ear</td>
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<td><strong>15.00 - 15.20</strong></td>
<td>Coffee break</td>
<td>Coffee break</td>
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<td>Description of masks, alphas</td>
<td>Topological optimization of the model</td>
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<td>Using topology subdivision to add details</td>
<td>Explaining layers and simple animation</td>
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<td>Practical case - using masks and alphas to detail an epithetic</td>
<td>Exporting models out of Zbrush for 3D printing</td>
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<td>Using video and image functions for presentation</td>
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<td>Practical case - exporting and 3D print of a master model</td>
<td>Summary of the Zbrush course</td>
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