Applied Informatics

Introduction to the creation and use of presentations, modification according to relevant norms

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Introduction to the creation and use of presentations, modification according to relevant norms

1. **Introduction – info about the study**
2. **Basic terms – using presentations**
3. **Modification of the presentation according to relevant norms**
4. **Check questions and assignments**

Aims of the lecture

1. To give basic information about the course.

2. To introduce and explain basic terms of using presentations and the creation of formalized documents according to the relevant norms.

3. Explain the use and the introduction of the terms in a case study.
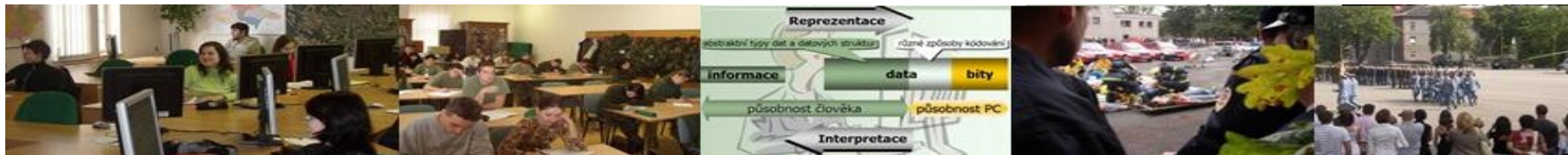
Importance of the course

❏ The student will be able to use his/her knowledge in a rational and systematic way. The student will purposefully be able to use selected information and communication technologies as a tool to collect, store, transform, evaluate, and to transmit information.

❏ Simultaneously the graduates will obtain two important prerequisites for passing other subjects prescribed by the study plan:

> ❏ theoretical knowledge and practical skills in the use of computer presentations to perform or to promote the results of their work, opinions, ideas and practice;
>
> ❏ theoretical knowledge and practical skills in the use of project software products, allowing to apply the principles of project management to solve specific technical problems.

Info about the „Applied informatics" course

Basic info:

- Full-time study
- 48 hours:
  - 24h lectures
  - 24h exercises

Topics:

1. Characteristics and properties of selected ICT
2. Possibilities of ICT in the acquisition and retrieving Information from databases
3. The use of IS in managerial work of a leader
4. Security of selected ICT in obtaining, storing, appreciation and transfer of information.

Concept of the course

The theme and content of the course Applied Informatics fits into the theoretical basis of the Army leadership study program at UoD FEM.

Resources = basic

ŠARMANOVÁ, Jana. *METODY ANALÝZY DAT - Učební text.* [online].© 2012, Ostrava: VŠB-TU. 170 s. ISBN 978-80-248-2565-6 Dostupné z: http://www.person.vsb.cz/archivcd/FEI/MAD/
BENDOVÁ, Klára. *Základy projektového řízení* [online]. 2012, č. 1. Dostupné z: http://www.ff.upol.cz/fileadmin/user_upload/FFkatedry/psychologie/publikace/Bendova/Bendova_K_a_kol_zaklady_projektoveho_rizeni.pdf
KRATOCHVÍL, Jiří, et al. *Metodika tvorby bibliografických citací.* [online]. 1. vyd.
Brno: Knihovna univerzitního kampusu MU, 2010. Dostupné z: http://http://is.muni.cz/do/rect/el/estud/prif/ps11/metodika/web/ebook_citace_2011.html

Resources = additional

PETERKA, J. *E-archiv - Tutoriály*. [online].
© Jiří Peterka, 2006-2011. Dostupné z:
<http://www.earchiv.cz/i_tutors.php3>.

HASHIMOTO, Alan. *Velká kniha digitální grafiky a designu*. Vyd. 1.Brno: Computer Press, 2008, 384 s. ISBN 978-80-251-2166-5.

BECK, M. - TEWS, E. *Practical attacks against WEP and WPA* [online]. Listopad 2008. Dostupné z:
http://dl.aircrack-ng.org/breakingwepandwpa.pdf

DVOŘÁK, D. - KALIŠ, J. *Microsoft Project 2013.* Brno: Computer Press, 2013. 336 s. EAN: 9788025138199 .

Exam conditions

- ☑ individual processing of sub-projects by using specific information technology, team processing, presentation and defense of the case study

- ☑ Individual oral exam

Informatics - science

❑ Informatics is a field of human activity, which has been working with information.
❑ It Includes a number of specialized scientific and technical fields.
❑ Informatics is an interdisciplinary field of science - across all disciplines.

The informatics

Theoretical informatics

•engaged in information theory,

•creates a new methodology,

•formulates questions and looks at them to address the needs of practice.

Applied informatics

•focuses on using communication and data

•provides a knowledge and methodological background for computing and transmission technologies, information and communication technologies (ICT).

Applied informatics

technical

•oriented towards technical means used in computer science;
Example: CAD systems in the design office*.*

social

•concerns of human society, relationships between people**;**
Example: Demographic data of statistical offices*.*

economical

•outputs are used to support economic management and decision-making**.**
Example: Facts about the controlled object and its surroundings*.*

Areas of economical informatics

Three kinds of information are processed:

1.*state, reality*

- **Facts about the controlled object**
- **Facts about the environment of the object**

2. *future, creation*

- targets, plans, prognosis
- Who, when will do what

3. *Processes leading to targets*

- Technological processes
- Expert knowledge

Areas of economical informatics

❑ **To process all three basic types of information a presentation can be used**

❑ ***Under a presentation we understand:***

    ❑ *explanation,*

    ❑ *illustrated example,*

    ❑ *a product,*

        ❑ e.g. in the program MS PowerPoint.

Why presentation?

Presentations are becoming more and more important.
They focus on communication and visualisation of data which will gain importance in the future.

Why?

• Management need more information for the decision making process.

• Decision makers want to see behind the bare information of their subordinates.

• Project work gains importance, internal and external project presentation reports about the project progress.

• The central decision criterion becomes subordinate to the assessment of their competence, their orientation in the decision-process and the ability to solve problems.

Why presentation?

❑ Presentation generally includes definition of tasks related to visual presentation (intent, goals, processes, products, advertising, ...), in particular to raise awareness and support for economic activities.

❑ Apart from the physical and media it includes a variety of computer components - presentation and presentation graphics HW and SW.

Types of presentation

❑ **Static presentations**

❑ to advertise products and services – effective 24h a day (quickly loosing atractivity)

= billboards, posters, ads,
static HTML file

❑ **Dynamic presentations**

❑ the highest impact and scope of the public? - is more expensive than a static presentation

= practical demonstrations, film,

video, television, computer, slide,

dynamic HTML file …

Basic aspects of presentations

❑ **Content:**

    ❑ *Individual*

        ❑ what is presented

        ❑ to who (audience)

❑ **Formal:**

    ❑ Ways and tools to achieve the aim of the presentation.
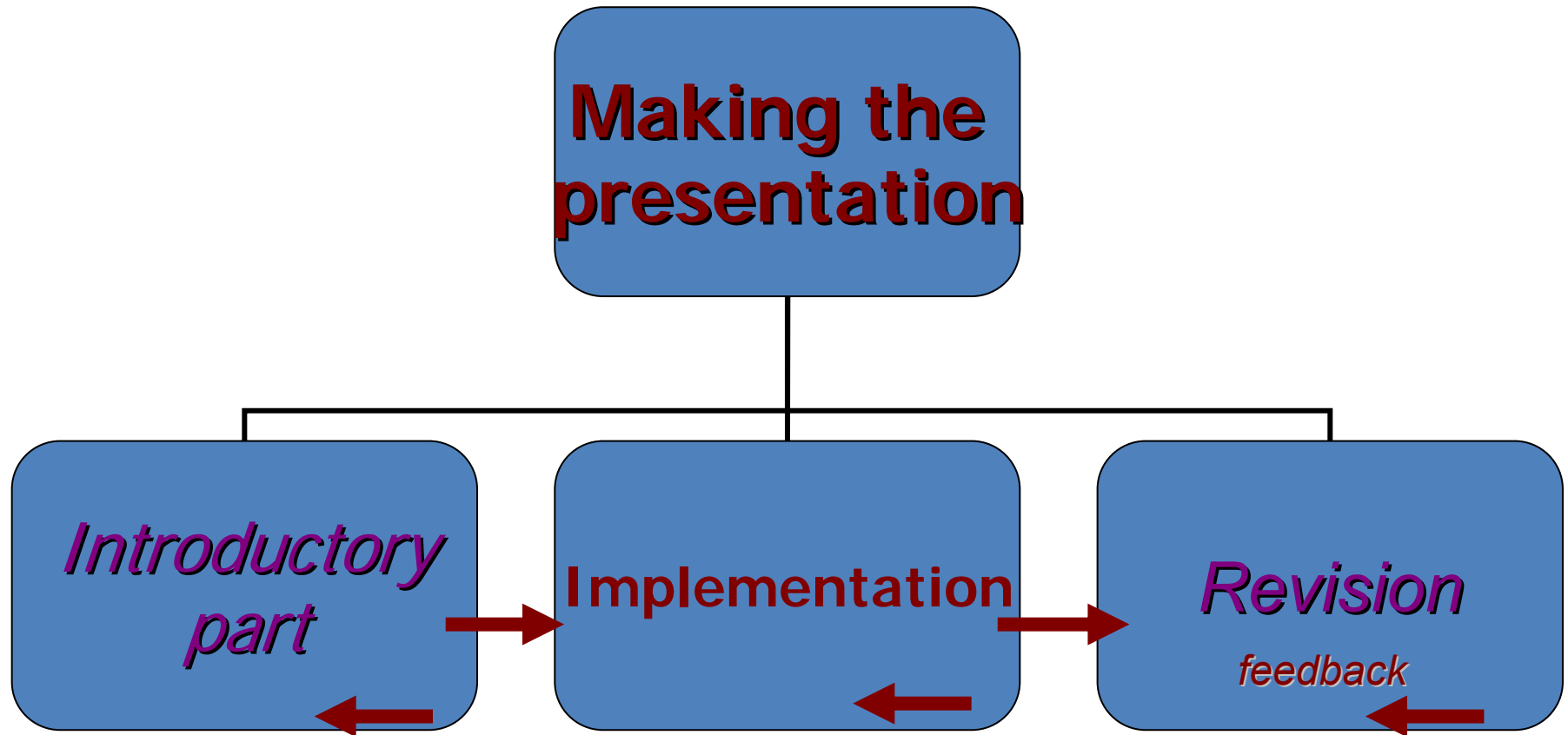
Basic aspects of presentations

YES

- To give a maximum amount of information in a limited time using AV tools.

NO

 - Flying circus

Making the presentation

Making the presentation

Introductory part → **Implementation** → *Revision* *feedback*

Introductory phase

❑ **The environment**

    ❑ Where?

    ❑ Audience?

    ❑ How long?

❑ **The aim of the presentation**

❑ **prepare materials** (texts, photos, …)

Implementation

Where to "publish"

- ❑ Information stands
- ❑ Press releases
- ❑ Project presentations
- ❑ Publications
- ❑ Advertising
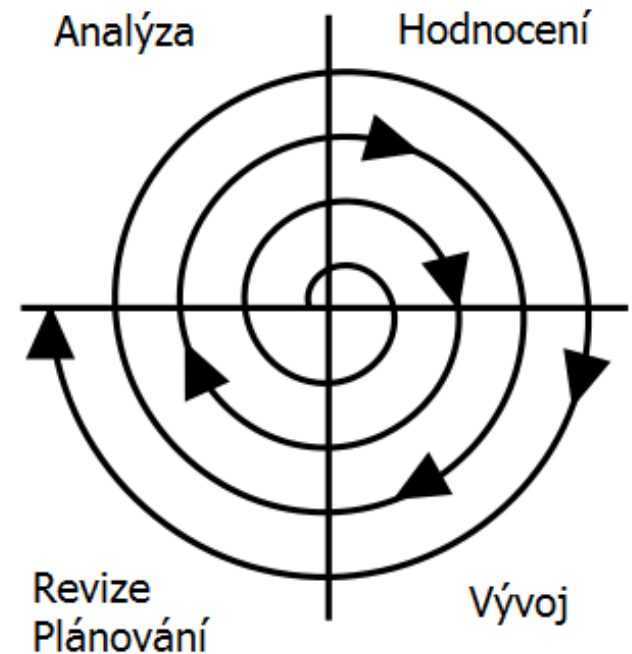
Implementation: multimedia

Why:

- ❑ More attractive
- ❑ Simple and fast to do
- ❑ Positive experience
- ❑ Reasonable HW and SW requirements
- ❑ MS PowerPoint (and other SW) can be used

Implementation - presentation

Spiral model

❑ Spiral model combines:
  ❑ Prototype approach (top–down)
  ❑ design approach (bottom-up)

  = to combine advantages of both approaches.

[1]

Implementation - presentation

Spiral model – basic principles *[1]:*

❑ Risk analysis + minimizing project risks by division to smaller segments

❑ During the implementation it is possible to evaluate risks and consider alternatives of the next progress.

❑ Each cycle of the spiral starts a set of steps for each level.

Spiral model

Each cycle includes 4 phases [1]:

❑ *Analysis –* setting the aims, targets, alternatives and scale of iteration

❑ *Evaluation* – evaluation of alternatives, identification and coverage of risks

❑ *Development* – development of the product and verification of expected results

❑ *Revision + Planning*
 – the plan for the next iteration

Preentation SW

❑ *Microsoft PowerPoint* dominates currently.

❑ Sophisticated environment, templates, …

❑ Different versions, different file formats (ppt, pptx)

  ❑ Compatibility packs, free viewers

❑ Playing embedded video files may be dependent on the target computer.

❑Free alternatives

  ❑ Open Office, Libre Office

Formal aspects

❑ Norm *ČSN 01 6910 - Guidelines for text presentation.*
❑ Further developed by other norms.
❑ Depending on SW support.
❑ Depending of the particular topic / field of presentation.

Basic terms

❑ **Column**

    ❑ surface covered by text.

❑ **Header, footer**

    ❑ space above/below the text column

❑ **Header of the document**

    ❑ The top part of the document including the institution name and other details about the entity producing the document

❑ **Footer of the page**

    ❑ the bottom part of the text column

❑ **Indent**

    ❑ empty space at the beginning of the first line of a paragraph [1]

Basic terms

Type and size of fonts

❑ **Monospaced fonts** (e.g. `Courier`)
   or proportional fonts (e.g. Times New Roman).

❑ **Sans serif fonts** (Arial, Tahoma, Verdana)
   or serif fonts (Times New Roman, `Courier`).

❑ **For business correspondence** - Arial or Times New Roman.

❑ For numerical tables - use monospaced fonts.

# Basic terms

Type and size of fonts

❑ **For print** - Times New Roman or Arial,
for reading at the screen: Verdana or Tahoma.

❑ **Official documents** – conservative fonts with size at least 10 points.

❑ *Italic* should not be used to indicate addresses and numbers. It is not recommended to use italic for the whole letters.

   ❑ *(Italic is suitable to highlight shorter text parts – slanted text is more difficult to read).* [2]

Document templates

- To serve a particular purpose a document template can be used.
- Document templates can be a part of the text processors (SW).
- Document templates can be also used as a corporate culture.
- The formal aspects of a document are very much dependent on the document language.
- There's a significant difference between Czech and English.
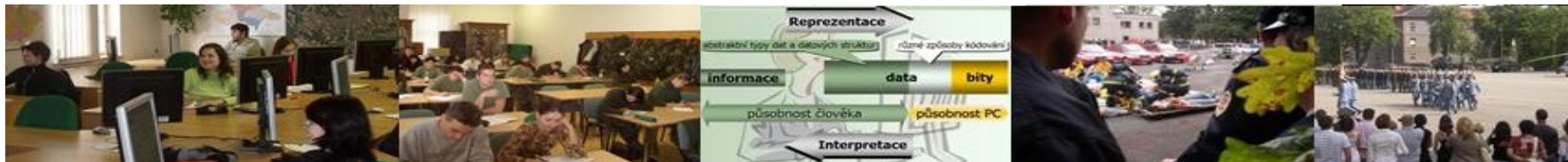
Assignments – what to do next?

Study hard and do your assignments!

As a home work on the text parts of the exercise assignments.

Start preparing the structure of your presentation.

Resources:

1. RERYCH, M. *Wasserfallmodell > Entstehungskontext* [online]. [cit. 2013-10-31]. Institut für Gestaltungs- und Wirkungsforschung, TU-Wien. Dostupné z: http://cartoon.iguw.tuwien.ac.at/fit/fit01/wasserfall/entstehung.html

2. *ZÁKLADNÍ TYPOGRAFICKÁ PRAVIDLA. ZÁKLADNÍ TYPOGRAFICKÁ PRAVIDLA* [online]. 2012, č. 1 [cit. 2013-09-09]. Dostupné z: http://www.gjszlin.cz/ivt/esf/ostatni-gdm/zakladni-typograficka-pravidla-a-jejich-uplatneni.pdf

3. Pravidla. cz. *Pravidla českého pravopisu* [online]. © 2013 Zásobování a.s. [cit. 2013-09-30]. Dostupné z:
   http://www.pravidla.cz/

Norms:

ČSN ISO 01 6910:2007 - *Guidelines for text presentation*
ČSN ISO 2145:1997 (01 0184) - *Documentation - Numbering of divisions and subdivisions in written documents*
ČSN ISO 3166–1:1999 (97 1002) – *Country codes*
ČSN ISO 8601:2005 (97 9738) – *Date and time*
ČSN EN 13619:2003 (760301) - *Postal Services - Mail Item Processing - Optical Characteristics For Processing Letters Gives optical characteristics for processing letters*
ČSN EN 14142–1:2003 (76 0401) - Postal services - Address databases - Part 1: Components of postal addresses