### Challenges in working and teaching at UCAS

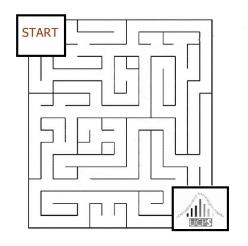
### Milena Kresoja

Department of Mathematics and Informatics Faculty of Sciences University of Novi Sad

11 June 2013, Belgrade

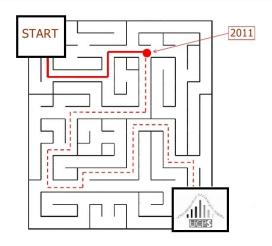


### Then&Now



prof. Zorana Luzanin, Applied statistics at UNS - from wishes to realization

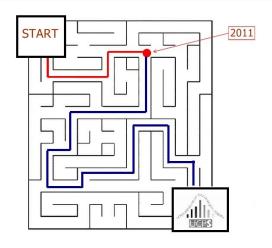




prof. Zorana Luzanin, Applied statistics at UNS - from wishes to realization



### Then&Now



prof. Zorana Luzanin, Applied statistics at UNS - from wishes to realization



# Quick remainder Challenges

#### To-do-list:

- establishment of University Centre of Applied Statistics
- Prealization of centre activities
  - education
  - research
  - consulting





# Quick remainder Challenges

#### To-do-list:

- establishment of University Centre of Applied Statistics
- 2 realization of centre activities
  - education
  - research
  - consulting





- establishment of University Centre of Applied Statistics
- Prealization of centre activities
  - education
  - research
  - consulting





# Quick remainder Challenges

#### To-do-list:

- establishment of University Centre of Applied Statistics
- realization of centre activities
  - education
  - research
  - consulting





# Quick remainder Challenges

#### To-do-list:

- establishment of University Centre of Applied Statistics
- realization of centre activities
  - education
  - research
  - consulting





- establishment of University Centre of Applied Statistics
- realization of centre activities
  - education
  - research
  - consulting





- establishment of University Centre of Applied Statistics
- 2 realization of centre activities
  - education
  - research
  - consulting





- establishment of University Centre of Applied Statistics
- 2 realization of centre activities
  - education
  - research
  - consulting





- interested students
- adequate teaching strategy and teaching material
- functional workplace



- interested students
- adequate teaching strategy and teaching material
- functional workplace



- interested students
- adequate teaching strategy and teaching material
- functional workplace



- interested students
- adequate teaching strategy and teaching material
- functional workplace



#### Call for students

Master studies in Applied statistics

### Requirements

- completed bachelor studies
- passed entering exam

### Students target group

- ambitious
- hardworking
- necessary knowledge





#### Call for students

Master studies in Applied statistics

### Requirements

- completed bachelor studies
- passed entering exam

### tudents target group

- ambitious
- hardworking
- necessary knowledge



#### Call for students

Master studies in Applied statistics

### Requirements

- completed bachelor studies
- passed entering exam

### tudents target group

- ambitious
- hardworking
- necessary knowledge



#### Call for students

Master studies in Applied statistics

### Requirements

- completed bachelor studies
- passed entering exam

### Students target group

- ambitious
- hardworking
- necessary knowledge

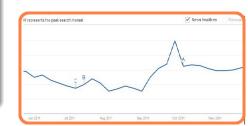


### Advertising

Spreading the information:

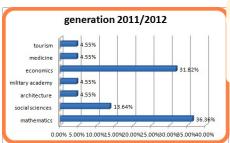
- posters, leaflets
- media (newspapers)
- internet (website, social networks)

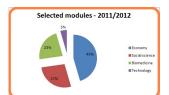
Searching of word "statistics" has grown up!









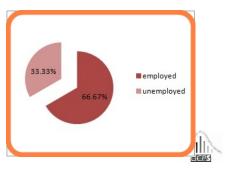


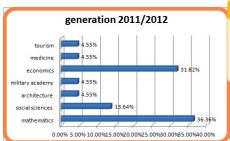
### Summary

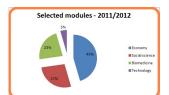
average age: 26

master and PhD

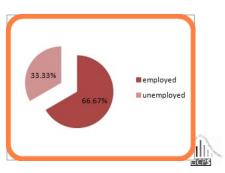
Serbia and Bosnia

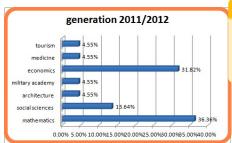


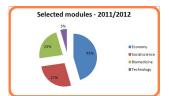




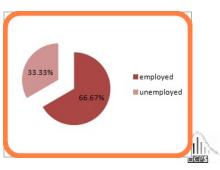
- average age: 26
- master and PhD
- Serbia and Bosnia

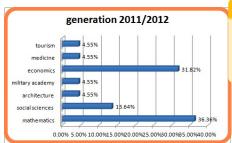


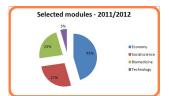




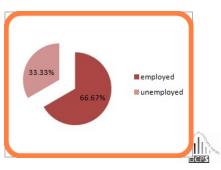
- average age: 26
- master and PhD
- Serbia and Bosnia

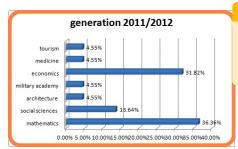


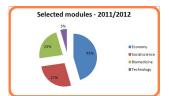




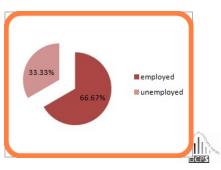
- average age: 26
- master and PhD
- Serbia and Bosnia

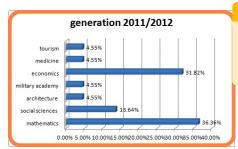


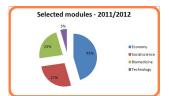




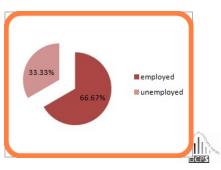
- average age: 26
- master and PhD
- Serbia and Bosnia

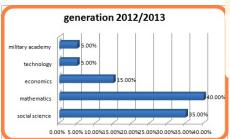


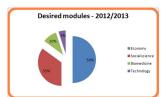




- average age: 26
- master and PhD
- Serbia and Bosnia

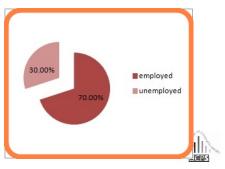


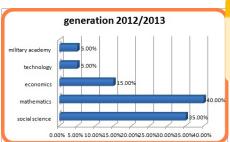


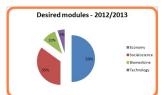


# average age: 27 master and PhD

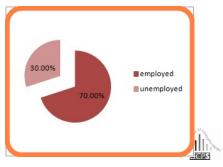
Serbia and Bosnia

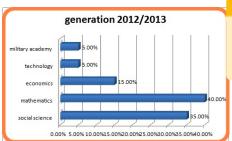


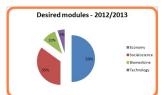




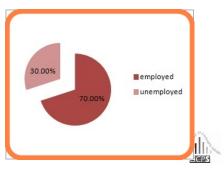
- average age: 27
- master and PhD
- Serbia and Bosnia

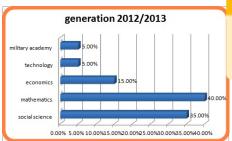


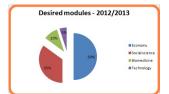




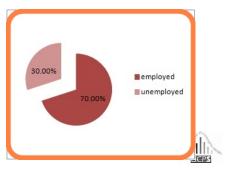
- average age: 27
- master and PhD
- Serbia and Bosnia

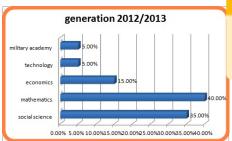


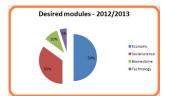




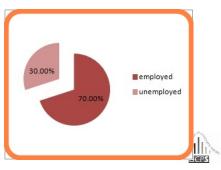
- average age: 27
- master and PhD
- Serbia and Bosnia

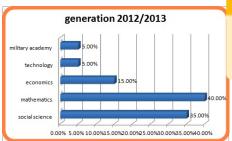


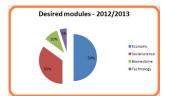




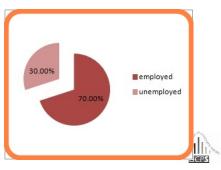
- average age: 27
- master and PhD
- Serbia and Bosnia







- average age: 27
- master and PhD
- Serbia and Bosnia



# Some first observations Challenge No.2

### Benefits:

- Students have clearly defined goals.
- Students are highly motivated for learning.
- Students have basic competences and experience.

### Shortcomings

- Students have different study approach.
- Possible troubles with teaching materials.
- Students are mainly employed.



# Some first observations Challenge No.2

#### Benefits:

- Students have clearly defined goals.
- Students are highly motivated for learning.
- Students have basic competences and experience.

### Shortcomings:

- Students have different study approach.
- Possible troubles with teaching materials.
- Students are mainly employed.





# Some first experiences Challenge No.2

### Obligatory courses

- Probability theory
- Statistical software
- Oata collection methodology
- Estimation&detection theory
- Sampling theory
- Official statistics
- Linear models
- Multivariate analysis
- Academic skills

#### Elective courses

- Linear Algebra & Calculus
- 2 Economics
- Social medicine
- Psychology



# Some first experiences Challenge No.2

### Obligatory courses

- Probability theory
- Statistical software
- Oata collection methodology
- Estimation&detection theory
- Sampling theory
- Official statistics
- Linear models
- Multivariate analysis
- Academic skills

#### Elective courses

- Linear Algebra & Calculus
- 2 Economics
- Social medicine
- Psychology



# Some first experiences Challenge No.2

### Obligatory courses

- Probability theory
- Statistical software
- Academic skills
- Estimation&detection theory
- Sampling theory
- Official statistics
- Linear models
- Multivariate analysis
- Data collection methodology

#### Elective courses

- Linear Algebra & Calculus
- 2 Economics
- Social medicine
- Psychology





No project is too big, too small or too complex or too challenging!

### Competences:

- computing and programming
- data analyzing
- choosing and applying statistical methods
- interpreting and presenting results



# No project is too big, too small or too complex or too challenging!

### Competences:

- computing and programming
- data analyzing
- choosing and applying statistical methods
- interpreting and presenting results

.....skills

- Problem solving
- Critical thinking
- Communicating statistics
- Collaborative learning

"The best way to learn is to do; the worst way to teach is to talk."

#### Hidden motive

Break down prejudice: statisticians are doers not thinkers!

### How to do it?

- examples, examples, examples
- group work assessment
- make it more interesting





# Last but not the least.. Challenge No.3

- computers
- software
- books





# Last but not the least.. Challenge No.3

- computers
- software
- books





### Novi Sad - City of Applied Statistics

### Thank you for your attention!



