

#### 2010 - the Bologna Process is now complete!

Serbia signed up to it like most European countries to achieve:

- improved student mobility,
- reduced student drop-out rates,
- reduced time to graduation, and
- improved quality control of the learning process.

The Bologna Process has now been implemented at the Faculty of Agriculture, so does it work?



Undergraduate degree courses according to the Bologna principles have been in place at the Faculty of Agriculture, Belgrade University for 3 years.

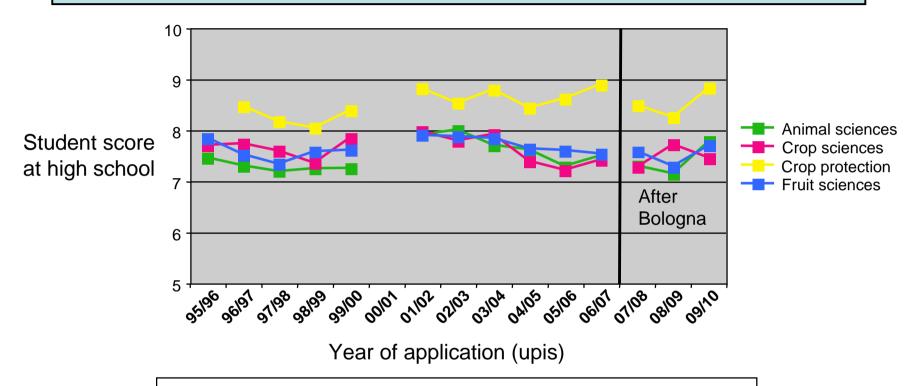
Here is an analysis of student performance before and after introducing degree courses according to the Bologna principles.

Year 1 courses of botany and zoology were studied.

The number of students taking exams in the first three exam periods of an academic year and the student exam success rates were analysed.



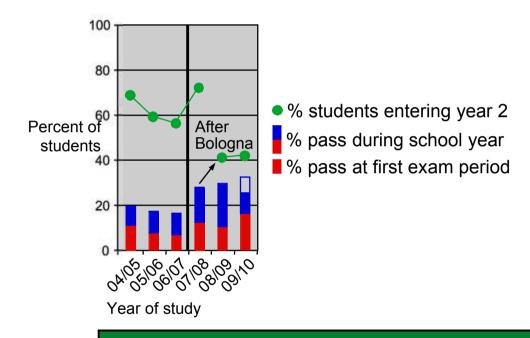
#### High-school scores\* for students applying to 4 Faculty departments



<sup>\*</sup> Scores are converted to a 0-10 scale where 10 is maximum and 5 is the minimum score accepted for entry to the Faculty.

Note - although no long-term trends in scores are evident, professors say knowledge of students entering year 1 is now significantly lower!

# Exam success rates as means over four departments: (Fruit sciences, Crop sciences, Plant protection, Animal sciences)

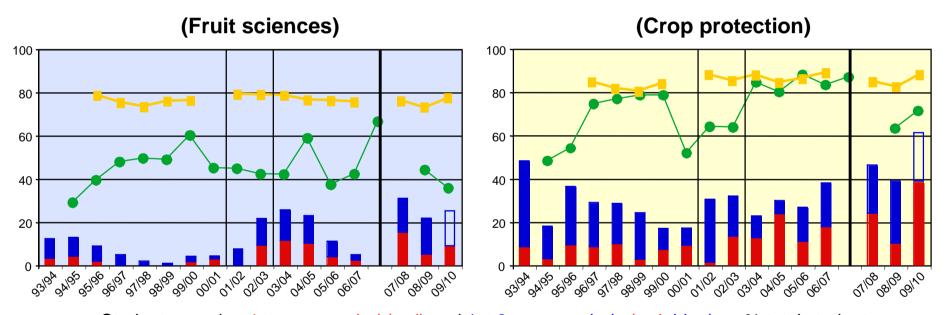


Overall student exam pass rates have gone up after 'Bologna' - so it works!

However, students entering year 2 have gone down after implementing 'Bologna'!



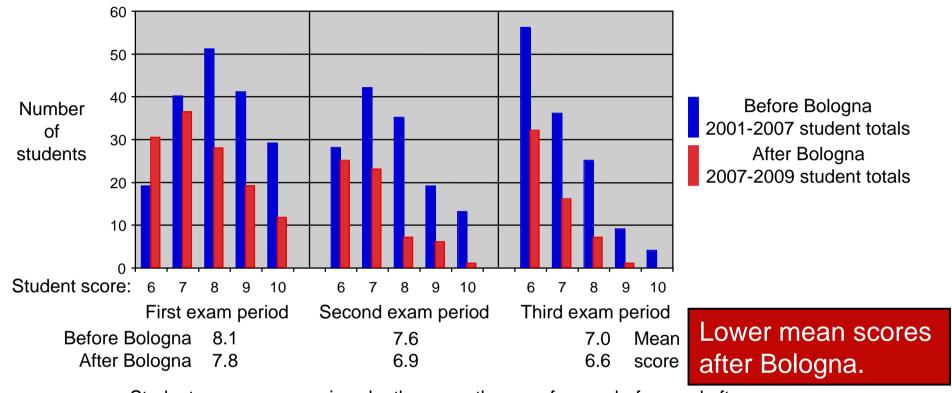
### Here are the same data for two contrasting departments:



Students passing 1st exam period (red) and 1st 3 exam periods (red+blue) as % total students and % students entering year 2 (green) and high-school scores (yellow).



## Frequency distribution of exam scores at each exam period



Students exam scores given by the same three professors before and after introduction of courses reformed according to the Bologna principles.

The proportion of good quality students has decreased significantly!

<u>%9s %10s %9+10s</u>

Before Bologna 15.4 10.3 25.8



To summarise effects of implementing 'Bologna':

Quality of students entering the Faculty: "the same"

Students taking exams during the year: UP

Students entering the next year: **DOWN** 

Quality of students passing exams: **DOWN** 

So what has all this effort and agony of implementing the Bologna process achieved?

Basically, at least in Serbia, *not a lot* because the system as a whole has not changed, and it is the university system that determines a student's fate.

2010 - Bologna's been achieved, so what do we do next?



#### Try to change the system?