

MEDINE2

MEDINE2

EUROPEAN ACADEMIC NETWORK IN MEDICAL EDUCATION

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Background

- Funded by the EC's Lifelong Learning Programme
- Erasmus Academic Network
- Continues from MEDINE (2004-2007)
- Chaired and co-ordinated by Allan Cumming, Edinburgh
- Started 1st Oct 2009 for 3 (3,5) years
- Grant of €600k, value €800k

Project Setup

- 93 project partners
- 6 Associated Partners
- Local Steering Group
- Executive Board
- Student Involvement

Structure

- 11 Work Packages; of those:
- 7 Development work packages
- Network management
- Dissemination of outputs
- Exploitation of outputs

Work packages – WP1

- MEDINELingua
- Led by Charite, Berlin (Ulrike Arnold)
- Language resources for EU medical students
- <http://medine2.com/Public/medinelingua.html>

Work packages – WP2

- Toolkit to promote openness and mobility in medical education and training in Europe
- Led by Université libre de Bruxelles (Sylvain Meuris)
- Online guide for students moving around Europe

Work packages – WP3

- Tuning Process for Medical Education
- Led by University of Edinburgh (Helen Cameron)
- Based on the Tuning work previously done
- Package of materials & support to those who want to carry out tuning in their organisations

Work packages – WP4

- Tuning 1st cycle degrees in medicine
- Led by University of Edinburgh (Michael Ross)
- Reaching consensus and publishing learning outcomes for 1st cycle

Work packages – WP5

- Curriculum trends in medical education in Europe in the 21st Century
- Led by AMEE (Ron Harden)
- On-line survey of curriculum trends

WP5: Curriculum Trends



WP5 Remit

To identify the current positions, aspirations and actions of European medical schools relating to trends in medical education



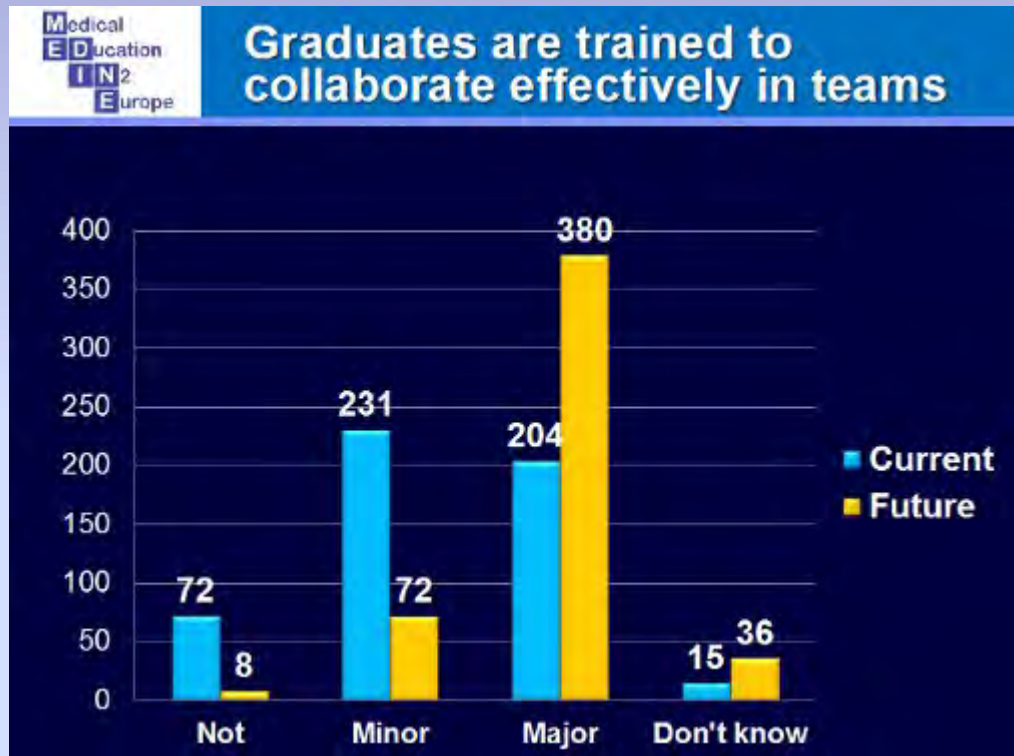
Respondents asked:

- Current position on the trends in their institution
- Vision as to the desirable developments in medical schools over next 3-5 years

WP5: Curriculum Trends

 Medical EDucation IN ² Europe	Score
Not a trend/development	0
Minor trend/development	1
Major trend/development	2

WP5: Curriculum Trends



Work packages – WP6

- Integration of the Bologna Process within Medical Schools in Bologna Countries
- Led by AMEE (Madalena Patricio)
- On-line survey of Bologna implementation in medical education

Work packages – WP7

- Integration of the research component in European Medical Education
- Led by Vrije Universiteit Brussel and Medical University of Vienna (Chris van Schravendijk & Richard Marz)
- Tuning of 3rd cycle Bologna
- Promoting best practice research models

Third cycle of Med Education: List of 60 relevant terms for research-related concepts

41	PhD
42	Dr. Med.
43	Supervisor
44	Supervision culture
45	Doctoral School
46	QC-Survey
47	Collaborative doctoral programmes
48	Co-tutelle
49	Joint degrees
50	International joint doctoral programmes

2. RESEARCH-BASED PhD THESIS

- The PhD thesis in medical sciences is normally research-based. The research is not undertaken as an objective in itself, but rather as a means in most cases of testing the validity of a hypothesis. Therefore, a research-based PhD thesis is also hypothesis-based. These properties will directly be visible in the PhD thesis; after the introduction, a clearly phrased research aim is formulated, either as the central question behind the work, or as a hypothesis, i.e. a possible answer to that question. In either case, the research behind the thesis is undertaken to investigate the question or test the hypothesis, and the outcome, i.e. the results, is critically discussed.
- An alternative to the hypothesis-based PhD is the PhD thesis structured and conceptualized as a monograph, a book in which knowledge of the topic is brought under a thematic structure without a central question or hypothesis. In this format, a central hypothesis or set of hypotheses may not be apparent. However, according to the Salzburg principles, a PhD thesis should always contain new knowledge produced by original research.

Work packages – WP8 - 11

- Management, dissemination, exploitation and QA
- Led by University of Edinburgh (Allan Cumming, Carol Telford and Michael Begg)
- Events
- Website www.medine2.com

Integrating research skills and competences in the Medical Curriculum

A workshop on finding the right balance



Chris Van Schravendijk

Brussels Free University, Brussels, Belgium

Richard Marz

Medical University of Vienna, Austria

Josanne Vassallo

University of Malta Medical School,
Guardamangia, Malta

Herbert Plass

Medical University of Vienna, Austria

As of March 23rd, 404 colleagues have completed
the online survey for WP7 (IRCOMED)
Are you one of them?

1. Yes

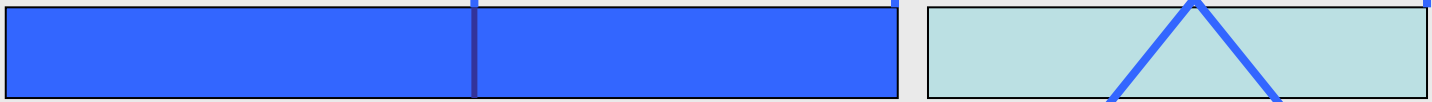
2. No

End of cycle (or stage):

Bachelor
1st cycle

Master
2nd cycle

PhD
3rd cycle



Length of cycle (or stage): 3 years

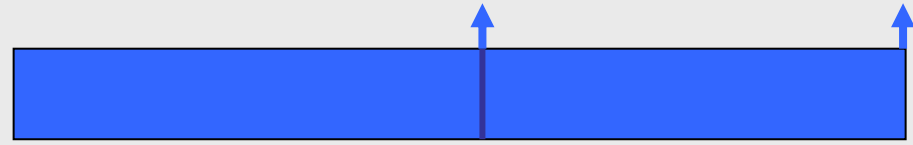
2-3 years

3-4 years

End of cycle (or stage):

Bachelor
1st cycle

Master
2nd cycle



Length of cycle (or stage): 3 years

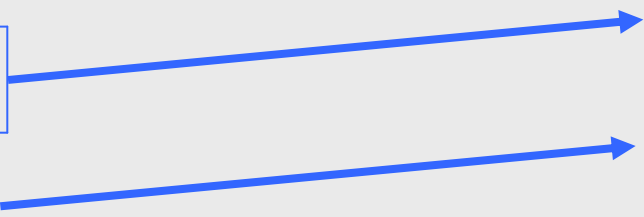
2-3 years

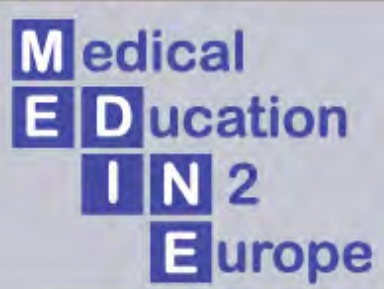


Research-related

Abilities / competencies

Courses





Work Packages

- 01 MEDINElingua
- 02 Mobility Toolkit
- 03 Tuning Process
- 04 Bologna First Cycle
- 05 Curriculum Trends
- 06 Progressing Bologna
- 07 Research
- 08 Network management
- 09 Dissemination of MEDINE2 outputs

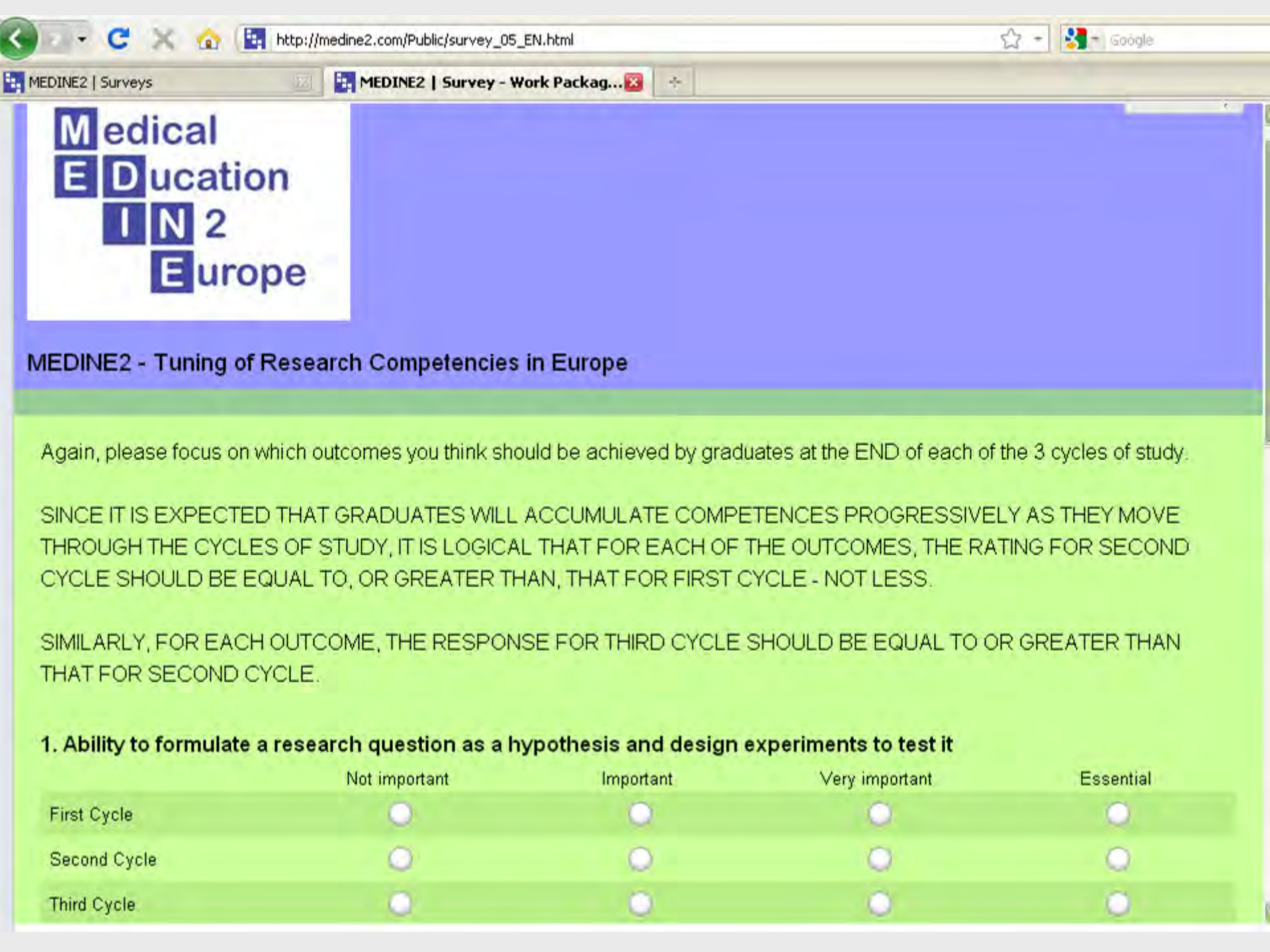
Surveys

WP7 Survey: What extent research competences should be integrated into the medical curriculum?

Please find below the link to our survey which asks your opinion to what extent research competences should be integrated into the medical curriculum.

You will probably agree that medical research is important for the development of better patient treatment. But finding the right balance in a tight core curriculum in what research competences every medical student needs is still a major challenge for those building a medical curriculum.

The enclosed Tuning survey has been developed by the MEDINE2 workpackage 7 (D26) group and other members of the MEDINE2 project. The survey is meant as a tool to bring us a step closer in finding a European consensus to an optimal integration of this research component into the medical curriculum.



MEDINE2 - Tuning of Research Competencies in Europe

Again, please focus on which outcomes you think should be achieved by graduates at the END of each of the 3 cycles of study.

SINCE IT IS EXPECTED THAT GRADUATES WILL ACCUMULATE COMPETENCES PROGRESSIVELY AS THEY MOVE THROUGH THE CYCLES OF STUDY, IT IS LOGICAL THAT FOR EACH OF THE OUTCOMES, THE RATING FOR SECOND CYCLE SHOULD BE EQUAL TO, OR GREATER THAN, THAT FOR FIRST CYCLE - NOT LESS.

SIMILARLY, FOR EACH OUTCOME, THE RESPONSE FOR THIRD CYCLE SHOULD BE EQUAL TO OR GREATER THAN THAT FOR SECOND CYCLE.

1. Ability to formulate a research question as a hypothesis and design experiments to test it

	Not important	Important	Very important	Essential
First Cycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second Cycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third Cycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Link of abilities to research-related courses



Introduction of research-related courses

16 exemplary courses

- Medical informatics
- Principles of evidence-based medicine
- Introduction to scientific thought
- **Principles of med stat and epidemiology**
- Biomedical laboratory technology
- Scientific communication
- Development of a scientific hypothesis
- Experimental animal handling & care
- Critical reading & writing of sci papers
- Handling databases in the biomed sci
- Basics of clinical investigation
- Applied medical epidemiology
- **Master thesis (3 variants)**
- Intellectual property, tech & biosafety
- Medical research rotation
- Ethics in medical practice & research

Introduction of research-related courses

exemplary course

- Principles of med stat and epidemiology

Abilities to:

Choose the appropriate qualitative and quantitative research method (7)

Analyse research findings (qualitative or quantitative data) (14)

Select and carry out appropriate statistical tests and interpret results (15)

7. Choose the appropriate qualitative and quantitative research method

First Cycle (years 1 – 3)

7. Ability to choose the appropriate qualitative or quantitative research method

	Not important	Important	Very important	Essential	Rating Average	Response Count
First Cycle	48.2% (185)	40.1% (154)	9.4% (36)	2.3% (9)	1.66	384

- | | | |
|----|----------------|-------|
| 1. | Not important | 5,5% |
| 2. | Important | 16,5% |
| 3. | Very important | 4,7% |
| 4. | essential | 3,9% |

7. Choose the appropriate qualitative and quantitative research method

Second Cycle (years 4 – 6)

7. Ability to choose the appropriate qualitative or quantitative research method

	Not important	Important	Very important	Essential	Rating Average	Response Count
Second Cycle	10.1% (39)	36.3% (140)	42.7% (165)	10.9% (42)	2.54	386

- | | | |
|----|----------------|-------|
| 1. | Not important | 1,3% |
| 2. | Important | 28,2% |
| 3. | Very important | 43,6% |
| 4. | essential | 26,9% |

14. Analyse research findings (qualitative or quantitative data)

First Cycle (years 1 – 3)

14. Ability to analyse research findings (qualitative or quantitative data)

	Not important	Important	Very important	Essential	Rating Average	Response Count
First Cycle	24.0% (90)	58.7% (220)	14.1% (53)	3.2% (12)	1.97	375

- | | | |
|----|----------------|-------|
| 1. | Not important | 4,5% |
| 2. | Important | 36,4% |
| 3. | Very important | 40,9% |
| 4. | essential | 18,2% |

14. Analyse research findings (qualitative or quantitative data)

First Cycle (years 1 – 3)

14. Ability to analyse research findings (qualitative or quantitative data)

	Not important	Important	Very important	Essential	Rating Average	Response Count
First Cycle	24.0% (90)	58.7% (220)	14.1% (53)	3.2% (12)	1.97	375

1. Not important 21,8%
2. Important 51,3%
3. Very important 21,8%
4. essential 5,1%

14. Analyse research findings (qualitative or quantitative data)

Second Cycle (years 4 – 6)

14. Ability to analyse research findings (qualitative or quantitative data)

	Not important	Important	Very important	Essential	Rating Average	Response Count
Second Cycle	4.5% (17)	22.9% (86)	51.1% (192)	21.5% (81)	2.90	376

1.	Not important	0,0%
2.	Important	20,7%
3.	Very important	42,7%
4.	essential	36,6%

15. Select and carry out appropriate statistical tests and interpret results

First Cycle (years 1 – 3)

15. Ability to select and carry out appropriate statistical tests and interpret the results

	Not important	Important	Very important	Essential	Rating Average	Response Count
First Cycle	32.0% (120)	49.6% (186)	14.4% (54)	4.0% (15)	1.90	375

1.	Not important	27,2%
2.	Important	55,6%
3.	Very important	13,6%
4.	essential	3,7%

15. Select and carry out appropriate statistical tests and interpret results

Second Cycle (years 4 – 6)

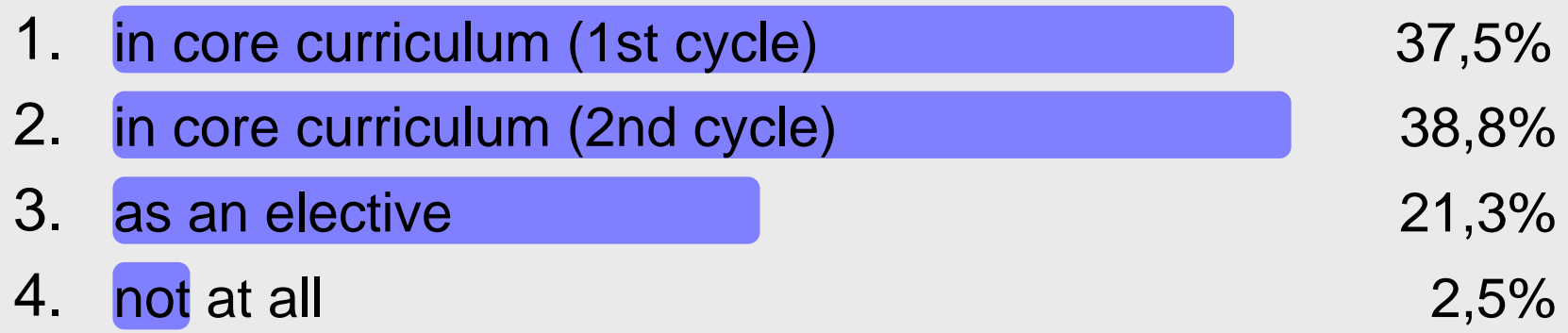
15. Ability to select and carry out appropriate statistical tests and interpret the results

	Not important	Important	Very important	Essential	Rating Average	Response Count
Second Cycle	5.9% (22)	29.3% (110)	46.0% (173)	18.9% (71)	2.78	376

1. Not important 2,5%
2. Important 30,4%
3. Very important 39,2%
4. essential 27,8%

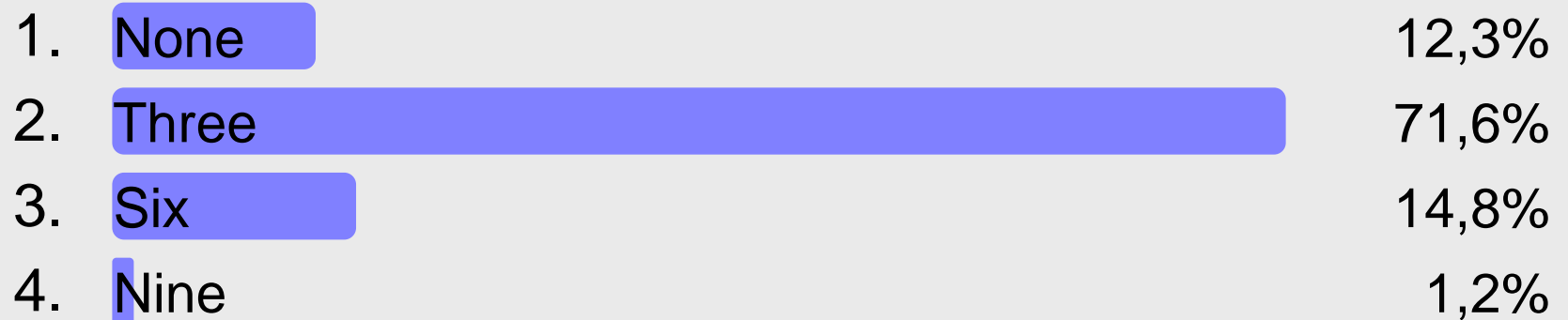
Your Vote:

“Principles of med stat and epidemiology” should be offered



How many ETCS credits should be given for
“Principles of med stat and epidemiology”?
(out of 60 per year)

Your answer:



Introduction of research-related courses

16 exemplary courses

- Medical informatics
- Principles of evidence-based medicine
- Introduction to scientific thought
- **Principles of med stat and epidemiology**
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- Scientific communication
- Development of a scientific hypothesis
- Experimental animal handling & care
- Critical reading & writing of sci papers
- Handling databases in the biomed sci
- Basics of clinical investigation
- Applied medical epidemiology
- **Master thesis (3 variants)**
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- Medical research rotation
- Ethics in medical practice & research

Introduction of research-related courses

exemplary course

- **Master thesis**

Should it be required?

How long should students work on it?

Vote:
Should a master thesis be required?

1. Only as elective
2. research carried out in an equivalent of time of 3 months
3. research carried out in an equivalent of time of 6 months
4. research carried out in an equivalent of time of 9 months and based on original observations

Your Vote

Should a master thesis be required?

- | | | |
|----|--|-------|
| 1. | Only as elective | 12,3% |
| 2. | research carried out in an equivalent of time of 3 months | 71,6% |
| 3. | research carried out in an equivalent of time of 6 months | 14,8% |
| 4. | research carried out in an equivalent of time of 9 months and based on original observations | 1,2% |

Thank you for your participation

