

Program studiów na kierunku ZOOTECHNIKA - studia stacjonarne II stopnia 2017/2018

CURRICULUM OF SECOND CYCLE STUDY - Animal Science

speciality: Bioengineering in Animal Science

| Item | Course | Connected with research | Σ hours | Lectures | seminars | Laboratories | | | Σ labs. + sem. | Hours in semester | | | | | | form of passing | ECTS in semester | | | Σ ECTS |
|----------|---|-------------------------|------------|------------|-----------|--------------|------------|-------------------|----------------|-------------------|------------|------------|------------|------------|------------|-----------------|------------------|-----------|-----------|-----------|
| | | | | | | Au. | lab. | field exercise s. | | 1 | | 2 | | 3 | | | 1 | 2 | 3 | |
| | | | | | | | | | | Lectures | labs | lectures | Labs | Lectures | Labs | | | | | |
| A | GROUP OF GENERAL SUBJECTS | | 90 | 45 | 0 | 45 | 0 | 0 | 45 | 0 | 30 | 0 | 0 | 45 | 15 | | 2 | 0 | 5 | 7 |
| 1 | World food economics | | 30 | 15 | | 15 | | | 15 | | | | | 15 | 15 | E | | | 3 | 3 |
| 2 | Rural development | | 30 | 30 | | | | | 0 | | | | | 30 | | Z | | | 2 | 2 |
| 3 | Polish language (for foreign students, Polish students - English language course) | | 30 | | | 30 | | | 30 | | 30 | | | | | Z | 2 | | | 2 |
| B | GROUP OF BASIC SUBJECTS | | 105 | 45 | 0 | 30 | 30 | 0 | 60 | 30 | 30 | 15 | 30 | 0 | 0 | | 6 | 4 | 0 | 10 |
| 4 | Statistics | X | 45 | 15 | | 30 | | | 30 | 15 | 30 | | | | | E | 4 | | | 4 |
| 5 | Introduction to genetic engineering | X | 15 | 15 | | | | | 0 | 15 | | | | | | Z | 2 | | | 2 |
| 6 | Experimental methods in animal science | X | 45 | 15 | | | 30 | | 30 | | | 15 | 30 | | | E | | 4 | | 4 |
| C | GROUP OF DIRECTIONAL SUBJECTS | | 180 | 75 | 0 | 0 | 105 | 0 | 105 | 30 | 60 | 45 | 45 | 0 | 0 | 0 | 9 | 6 | 0 | 15 |
| 7 | Biotechniques in animal reproduction | X | 45 | 15 | | | 30 | | 30 | 15 | 30 | | | | | E | 4 | | | 4 |
| 8 | Proecological methods of livestock production | X | 45 | 15 | | | 30 | | 30 | 15 | 30 | | | | | Z | 5 | | | 5 |
| 9 | Design and organization of animal breeding programs | X | 30 | 15 | | | 15 | | 15 | | | 15 | 15 | | | Z | | 2 | | 2 |
| 10 | Analytical methods in animal science | X | 30 | 15 | | | 15 | | 15 | | | 15 | 15 | | | Z | | 2 | | 2 |
| 11 | Genetic diagnostics | X | 30 | 15 | | | 15 | | 15 | | | 15 | 15 | | | Z | | 2 | | 2 |
| | SUM A + B + C | | 375 | 165 | 0 | 75 | 135 | 0 | 210 | 60 | 120 | 60 | 75 | 45 | 15 | 0 | 17 | 10 | 5 | 32 |
| C | Pspecialty subjects: Bioengineering in Animal Science | | 465 | 215 | 60 | 0 | 190 | 0 | 250 | 75 | 45 | 70 | 110 | 70 | 95 | | 13 | 20 | 25 | 58 |
| 12 | Applied physiology and endocrinology | X | 45 | 30 | | | 15 | | 15 | 30 | 15 | | | | | E | 4 | | | 4 |
| 13 | In vitro culture of animal tissues and cells | X | 30 | 15 | | | 15 | | 15 | 15 | 15 | | | | | E | 4 | | | 4 |
| 14 | Fish reproduction | X | 30 | 15 | | | 15 | | 15 | 15 | 15 | | | | | Z | 2 | | | 2 |
| 15 | Microfactors of breeding environment | X | 15 | 15 | | | | | 0 | 15 | | | | | | Z | 1 | | | 1 |
| 16 | Molecular biology in poultry breeding | X | 15 | 10 | | | 5 | | 5 | | | 10 | 5 | | | Z | | 1 | | 1 |
| 17 | The basics of nutrigenomic | X | 30 | 15 | | | 15 | | 15 | | | 15 | 15 | | | E | | 3 | | 3 |
| 18 | Decision support systems in animal management | X | 45 | 15 | | | 30 | | 30 | | | 15 | 30 | | | E | | 4 | | 4 |
| 19 | Dairy cattle nutrition | X | 45 | 30 | | | 15 | | 15 | | | | | 30 | 15 | E | | | 4 | 4 |
| 20 | International successes of Polish-bred Arabian horses | | 30 | 15 | | | 15 | | 15 | | | | | 15 | 15 | E | | | 3 | 3 |
| 21 | Systems of production and organization of the reproduction of cattle and pigs | | 30 | 10 | | | 20 | | 20 | | | | | 10 | 20 | Z | | | 3 | 3 |
| 22 | Facultative courses* - semester 2 | X | 60 | 30 | | | 30 | | 30 | | | 30 | 30 | | | Z | | 8 | | 8 |
| 23 | Facultative courses* - semester 3 | X | 30 | 15 | | | 15 | | 15 | | | | | 15 | 15 | Z | | | 4 | 4 |
| 24 | Diploma practice (4 weeks) | X | 0 | | | | | | | | | | | | | Z | 2 | | | 2 |
| 25 | Diploma seminar and master's thesis preparation | X | 60 | | 60 | | | | 60 | | | | 30 | | 30 | Z | | 4 | 9 | 13 |
| 26 | Diploma exam** | | 0 | | | | | | | | | | | | | E | | | 2 | 2 |
| | TOTAL SUM (hours) A + B + C + D | | 840 | 380 | 60 | 75 | 325 | 0 | 460 | 135 | 165 | 130 | 185 | 115 | 110 | | 30 | 30 | 30 | 90 |

* wybór z listy przygotowanej w programie ramowym

** zgodnie z zarządzeniem Rektora nr 59/2016

In blue - modules run under the ERASMUS program

| | |
|---|-----------|
| facultative modules (27 ECTS) | ESTS |
| facultative courses | 12 |
| diploma practice | 2 |
| diploma seminar and master's thesis preparation | 13 |
| SUM | 27 |

| | |
|--------------------------------|-------------|
| 50 % ECTS w kontakcie = 1140 h | h |
| plan of study | 840 |
| diploma practice | 160 |
| consultations and research | 100 |
| exams | 40 |
| TOTAL | 1140 |

ECTS related to research: 75

Semestr: 1 300 2 315 3 225 840