**EUROPEAN MASTER IN HEALTH AND PHYSICAL ACTIVITY - ACADEMIC YEAR 2023 - 2024 - 1st year, First Semester - MODULE 1 "Biomedical Issues in Health and Exercise" - 9 - 27 October 2023 (total face-to-face hours 96)**

**1ST WEEK: 9 - 13 October 2023 (week 41°)** - Unless otherwise specified, the lectures will be hosted in Classroom MA4

| TIME | MONDAY, 9 OCT | TUESDAY, 10 OCT | WEDNESDAY, 11 OCT | THURSDAY, 12 OCT | FRIDAY, 13 OCT |
|---|---|---|---|---|---|
| 8.15 - 9.00 | **Guided visit** | | | | |
| 9.00 - 10.00 | Welcome & Opening Session (**D. Caporossi – A. Baca - P. Caserotti – S. Loland - C. Wilke**) (Marinozzi Hall) | Biomechanics and motion analysis - I [mechanical principles, methods] (**A. Baca**) | Biomechanics and motion analysis - II (**A. Baca**) | Molecular adaptation to health-enhancing PA - I (**B. Wessner**) | "Omics" in training adaptation **(Y. Pitsiladis)** |
| 10.00 - 11.00 | | | Innovative systems for enhancing physical activity (**A. Baca**) | | |
| 11.00 - 11.30 | **Break** | Biomechanics and motion analysis: practical issues - I **(A. Baca – P. Kornfeind**) | | Molecular adaptation to health-enhancing PA - II **(B. Wessner)** | "Omics" in training adaptation: practical aspects **(Y. Pitsiladis)** |
| 11.30 - 12.00 | **Keynote Lecture Federico Schena** (Verona Univ. Italy) (Marinozzi Hall) | | Biomechanics and motion analysis: practical issues - II (**A. Baca – P. Kornfeind)** | | |
| 12.00 - 13.00 | | | | | |
| 13.00 - 14.00 | **Welcome Reception** | Break | Break | Break | Break |
| 14.00 - 15.00 | **Outlines of program** | Measurements of physical Activity **(U. Ekelund)** | Physical activity, sedentary behaviour and health outcomes from an epidemiological perspective (**U. Ekelund**) | Molecular adaptation to health-enhancing PA - III (**B. Wessner**) | Genetic variability in health and diseases (**D. Caporossi**) |
| 15.00 - 16.00 | | | | | |
| 16.00 - 17.00 | Language Studies: Italian **(R. Ricci)** | | | Language Studies: Introduction to the Academic writing course **(F. Morino)** | |
| 17.00 - 18.00 | | | | | |

**2nd WEEK: 16 - 21 October 2023 (week 42°)** - Unless otherwise specified, the lectures will be hosted in Classroom MA4

| TIME | MONDAY, 16 OCT | TUESDAY, 17 OCT | WEDNESDAY, 18 OCT | THURSDAY, 19 OCT | FRIDAY, 20 OCT | SATURDAY, 21 OCT |
|---|---|---|---|---|---|---|
| 9.00 - 10.00 | Genetic basis of movement-related disorders: monofactorial diseases **(D. Caporossi)** (Classroom ) | Locomotor apparatus (bones) adaptation in response to health-enhancing physical exercise **(H. Tschan**) (Marinozzi Hall) | Influence of training on agonist-antagonist coactivation **(F. Felici )** | Descriptive statistics: introduction I **(G. Vannozzi)** | **Stati Generali Scienze Motorie** (States General of Sport Science) | Neuromuscular adaptation in muscles and tendons in response to health-enhancing PA **(P. Aagaard**) |
| 10.00 - 11.00 | | | | | | |
| 11.00 - 12.00 | Genetic basis of movement-related disorders: multifactorial diseases **(D. Caporossi)** | | Metabolic effects of exercise protocols **(M. Sacchetti)** | **Stati Generali Scienze Motorie** (States General of Sport Science) | | |
| 12.00 - 13.00 | | | | | | |
| 13.00 - 14.00 | **Break** | **Break** | **Break** | **Break** | **Break** | |
| 14.00 - 15.00 | Principles of Fitness/Wellness; Health benefits of endurance training (**H. Tschan**) (Classroom) | "The neural control of force" **(F. Felici )** *(Marinozzi Hall)* | Metabolic effects of exercise protocols: practical applications **(M. Sacchetti)** | **Stati Generali Scienze Motorie** (States General of Sport Science) | Muscle strength assessment and testing (**P. Aagaard**) | |
| 15.00 - 16.00 | | | | | | |
| 16.00 - 17.00 | | | | | | |
| 17.00 - 18.00 | | | | | | |

**3rd WEEK: 23 - 27 October 2023 (week 43°) - Unless otherwise specified, the lectures will be hosted in Marinozzi Hall**

| TIME | MONDAY, 23 OCT | TUESDAY, 24 OCT | WEDNESDAY, 25 OCT | THURSDAY, 26 OCT | FRIDAY, 27 OCT |
|---|---|---|---|---|---|
| 9.00 - 10.00 | Human nutrition in health, diseases, development and aging: basic principles and practical applications. (**S. Migliaccio**) | Nutrition and metabolism in health and exercise (**A. Parisi**) | Neuroendocrine adaptation to physical exercise: theoretical and practical issues (**P. Sgrò**) | Metabolic syndrome and type 2 diabetes (**P. Borrione**) | Physical activity, chronic diseases and public health **(V. Romano Spica)** (Classroom MA4) |
| 10.00 - 11.00 | | | | | |
| 11.00 - 12.00 | | Nutrition and metabolism in health and exercise: practical applications (**A. Parisi**) | | | Health and safety in sport and PA **(V. Romano Spica)** (Classroom MA4) |
| 12.00 - 13.00 | | | **Break** | | |
| 13.00 - 14.00 | **Break** | **Break** | "Physical activity and neurodegenerative diseases (**P. Borrione**) | **Break** | **Break** |
| 14.00 - 15.00 | Descriptive statistics: introduction II **(G. Vannozzi)** | Medical risks of substance abuse **(F. Pigozzi)** | | Descriptive statistics: introduction III **(G. Vannozzi)** | Language Studies: Academic writing course **(F. Morino)** (Classroom MA4) |
| 15.00 - 16.00 | | | | | |
| 16.00 - 17.00 | | | | | |