

# B.S. in Aerospace Physiology

## General Education Requirements

For a full description of Embry-Riddle General Education guidelines, please see the General Education section of this catalog. These minimum requirements are applicable to all degree programs

## General Education List

|   |           |
|---|-----------|
| Communication Theory and Skills (COM 122, COM 219, COM 221) | 9         |
| Humanities - Lower level                                    | 3         |
| Social Sciences - Lower level                               | 3         |
| Humanities or Social Sciences - Lower or Upper level *      | 3         |
| Humanities or Social Sciences - Upper level                 | 3         |
| Computer Science (CS 118 or CS 223 or EGR 115 or CYB 235)   | 3         |
| Mathematics (MA 210 required)                               | 6         |
| Physical and Life Sciences (BIO 120, CHM 110 or PS 113)     | 6         |
| <b>Total Credits</b>  | <b>36</b> |

## Aerospace Physiology Core Requirements (63 hours)

|             |  |   |
|-------------|--|---|
| BIO 110     | Research Methods I                           | 1 |
| BIO 111     | Research Symposium                           | 1 |
| BIO 120     | Foundations of Biology I                     | 3 |
| BIO 120L    | Foundations of Biology I Laboratory          | 1 |
| BIO 121     | Foundations of Biology II                    | 3 |
| BIO 121L    | Foundations of Biology II Lab                | 1 |
| BIO 215     | Genetics                                     | 3 |
| BIO 215L    | Genetics Laboratory                          | 1 |
| BIO 305     | Human Anatomy and Physiology I               | 3 |
| BIO 305L    | Human Anatomy & Physiology Laboratory        | 1 |
| BIO 306     | Human Anatomy and Physiology II              | 3 |
| BIO 306L    | Human Anatomy and Physiology II Laboratory   | 1 |
| BIO 405     | Molecular and Cell Biology                   | 3 |
| BIO 405L    | Molecular and Cell Biology Laboratory        | 1 |
| BIO 450     | Exercise Physiology and Human Performance    | 3 |
| CHM 110     | General Chemistry I                          | 3 |
| CHM 110L    | General Chemistry I Laboratory               | 1 |
| CHM 111     | General Chemistry II                         | 3 |
| CHM 111L    | General Chemistry II Laboratory              | 1 |
| CHM 210     | Organic Chemistry I                          | 3 |
| CHM 210L    | Organic Chemistry I Laboratory               | 1 |
| CHM 211     | Organic Chemistry II                         | 3 |
| or CHM 310  | Biochemistry                                 |   |
| CHM 211L    | Organic Chemistry II Laboratory              | 1 |
| or CHM 310L | Biochemistry Laboratory                      |   |
| HF 300      | Human Factors I: Principles and Fundamentals | 3 |
| HF 440      | Aerospace Physiology                         | 3 |
| or AS 357   | Flight Physiology                            |   |
| MA 222      | Business Statistics                          | 3 |
| PS 113      | Introductory Physics I                       | 3 |
| PS 113L     | Introductory Physics I Laboratory            | 1 |
| PS 117      | Introductory Physics II                      | 3 |
| PS 117L     | Introductory Physics II Lab                  | 1 |

|                      |                 |           |
|----------------------|-----------------|-----------|
| UNIV 101             | College Success | 1         |
| <b>Total Credits</b> |                 | <b>63</b> |

## Specified Electives (12-13 hours)

|              |   |              |
|--------------|---|--------------|
| BIO 211      | Research                                  | 1            |
| BIO 216      | Microbiology                              | 3            |
| BIO 216L     | Microbiology Laboratory                   | 1            |
| BIO 299      | Special Topics in Biology                 | 1-6          |
| BIO 311      | Research                                  | 1            |
| BIO 321      | Behavioral Neuroscience I                 | 3            |
| BIO 322      | Behavioral Neuroscience II                | 3            |
| BIO 335      | Cell Signaling and Disease                | 3            |
| BIO 399      | Special Topics in Biology                 | 1-6          |
| BIO 411      | Research Symposium II                     | 1            |
| BIO 440      | Clinical Rotation                         | 3            |
| BIO 444      | Immunology                                | 3            |
| BIO 499      | Special Topics in Biology                 | 1-6          |
| CHM 211      | Organic Chemistry II                      | 3            |
| CHM 211L     | Organic Chemistry II Laboratory           | 1            |
| CHM 310      | Biochemistry                              | 3            |
| CHM 310L     | Biochemistry Laboratory                   | 1            |
| ES 315       | Space Environment and Effects             | 3            |
| HF 312       | Ergonomics and Bioengineering             | 3            |
| HF 321       | Psychopharmacology                        | 3            |
| HF 326       | Human Performance in Extreme Environments | 3            |
| HF 399       | Special Topics in Human Factors           | 1-6          |
| HF 499       | Special Topics in Human Factors           | 1-6          |
| ME 320       | Fundamentals of Biomechanics              | 3            |
| ME 442       | Biofluid Mechanics                        | 3            |
| PSY 101      | Introduction to Psychology *              | 3            |
| PSY 310      | Sensation and Perception                  | 3            |
| PSY 320      | Aviation Psychology                       | 3            |
| PSY 335      | Physiological Psychology                  | 3            |
| SF 315       | Environmental Compliance and Safety       | 3            |
| SF 355       | Industrial Hygiene and Toxicology         | 3            |
| SP 220       | Life Support Systems                      | 3            |
| <b>Total</b> |   | <b>12-13</b> |

## Open Electives

|                                |           |
|--------------------------------|-----------|
| Open Electives - 100-400 Level | 6         |
| Open Electives - 300-400 Level | 9         |
| <b>Total Credits</b>           | <b>15</b> |

**Total Degree Credits** **120-121**

\* PSY 101 must be taken as a Specified Elective if not completed as a lower-level General Education Social Science requirement.