

# HEALTH SCIENCE, BS

Department Chair: Jeffrey Allen, DHSc, MPA

During your undergraduate journey, you will prepare for a career in health care under the broad context of intellectual growth, academic excellence and engaged service to others. That's what sets SBU apart from other undergraduate experiences. The Bachelor of Science degree in Health Science will provide the opportunity to study courses in medical terminology, health research methods, nutrition and epidemiology. As seniors, students will intern under professionals in their chosen health field and engage during Senior Capstone in discussions of health issues with peers and professors. Graduates will be well prepared for immediate employment in health promotion or to successfully enter graduate studies in the high demand fields of allied health.

Students should select courses and sequence in close consultation with the academic advisor

| Code                                     | Title  | Credits   |
|--|--|-----------|
| <b>Health Science Major Requirements</b> |  | <b>70</b> |
| HS-101                                   | INTRO TO HEALTH SCIENCE                          |           |
| HS-102                                   | MEDICAL TERMINOLOGY                              |           |
| HS-107                                   | Health-Related Fitness/Wellness                  |           |
| HS-201                                   | Research Methods in Health                       |           |
| HS-301                                   | EPIDEMIOLOGY                                     |           |
| HS-309                                   | NUTRITION  |           |
| HS-401                                   | SEMINAR: CURRENT TOPICS IN HEALTH SCIENCE        |           |
| HS-413                                   | INTERNSHIP                                       |           |
| BIO-105 & BIOL-105                       | BIOLOGICAL SCIENCE I and BIOLOGICAL SCI. I LAB   |           |
| BIO-106 & BIOL-106                       | BIOLOGICAL SCIENCE II and BIOLOGICAL SCI. II LAB |           |
| CHEM-101 & CHML-101                      | GENERAL CHEMISTRY I and GEN CHEM I LAB           |           |
| CHEM-102 & CHML-102                      | GENERAL CHEMISTRY II and GEN CHEM II LAB         |           |
| PHIL-338                                 | HEALTH CARE ETHICS                               |           |
| PSYC-101                                 | INTRO TO PSYCHOLOGY                              |           |

Select one of the following:

|                    |  |  |
|--------------------|--|--|
| BIO-211 & BIOL-211 | HUMAN ANATOMY & PHYSIOLOGY and HUMAN ANAT & PHYSIOL LAB        |  |
| BIO-212 & BIOL-212 | and HUMAN ANATOMY & PHYSIOLOGY and Human Anat & Physiol Lab    |  |
| BIO-331 & BIOL-331 | PHYSIOL & ANAT OF HUMAN I and PHYSIOL & ANAT HUMAN I LAB       |  |
| BIO-332 & BIOL-332 | and PHYSIOL & ANAT OF HUMAN II and PHYSIO/ANAT OF HUMAN LAB II |  |

### Health Science Electives <sup>1</sup>

Select three of the following:

|                     |  |  |
|---------------------|--|--|
| BIO-291             | GENETICS                                   |  |
| BIO-292             | CELL BIOLOGY                               |  |
| BIO-321 & BIOL-321  | GEN. MICROBIOLOGY and Gen Microbiology Lab |  |
| BIO-371             | BIOCHEMISTRY                               |  |
| CHEM-301 & CHML-301 | ORGANIC CHEMISTRY I and ORGANIC CHEM I LAB |  |

|   |   |            |
|---|---|------------|
| EDUC-210  | HUMAN DEVELOPMENT & LEARNING                    |            |
| EDUC-250  | ADOLESCENT DEVELOPMENT & LEARNING               |            |
| PHB-201   | BIOSTATISTICS IN PUBLIC HEALTH                  |            |
| PHB-301   | HEALTH PROMOTION PROGRAMMING                    |            |
| PHB-441   | PUBLIC HEALTH LEADERSHIP & MANAGEMENT           |            |
| PHED-312  | BIO-KINESIOLOGY                                 |            |
| HS-314 & 314L   | EXERCISE PHYSIOLOGY and EXERCISE PHYSIOLOGY LAB |            |
| PHED-208  | PREVENTION/CARE INJURIES                        |            |
| PHED-311  | PHYS ACT FOR PERSONS W DISABILITIES             |            |
| PHYS-103 & PHYL-103   | GENERAL PHYSICS I and GENERAL PHYSICS I LAB     |            |
| PHYS-104 & PHYL-104   | GENERAL PHYSICS II and GENERAL PHYSICS LAB II   |            |
| PSYC-215  | MALADAPTIVE BEHAVIOR                            |            |
| PSYC-240  | HEALTH PSYCHOLOGY                               |            |
| SOC-408   | HEALTH AND ILLNESS                              |            |
| <b>General Education Requirements (<a href="https://catalog.sbu.edu/undergraduate/degree-requirements/">https://catalog.sbu.edu/undergraduate/degree-requirements/</a>)</b> |   | <b>37</b>  |
| <b>General Electives</b>  |   | <b>13</b>  |
| <b>Total Credits</b>  |   | <b>120</b> |

<sup>1</sup> Students must also choose three electives from the following list: BIO-291, BIO-292, BIO-321/BIOL-321, BIO-371, CHEM-301/CHML-301, EDUC-210, EDUC-250, HS-314, HS-314L, PHB-201, PHB-301, PHB-441, PHED-208, PHED-311, PHED-312, PHYS-103/PHYL-103, PHYS-104/PHYL-104, PSYC-215, PSYC-240, and SOC-408 .

General electives are needed when a major course is also fulfilling one of the General Education Distributions.

Students must complete one course with diversity (D) coding and one writing intensive course (W). These courses do not need to be additional courses, but can be ones that also fill another requirement.

The following lists recommended for students who want to pursue graduate studies in Allied Health Fields. Students can use major electives and general electives for these courses.

## Health Science – Occupational Therapy Concentration (13 credit hours)

Students should research graduate programs and career goals when developing their plan of study and work in close consultation with the academic advisor.

| Code                      | Title  | Credits |
|---------------------------|--|---------|
| HS-314                    | EXERCISE PHYSIOLOGY                              | 3-4     |
| or PHED-312               | BIO-KINESIOLOGY                                  |         |
| or PHYS-103 & PHYL-103    | GENERAL PHYSICS I and GENERAL PHYSICS I LAB      |         |
| Take all of the following |  |         |
| SOC-101                   | INTROD. SOCIOLOGY (or other approved SOC course) | 3       |
| PSYC-215                  | MALADAPTIVE BEHAVIOR                             | 3       |

|                      |                      |              |
|----------------------|----------------------|--------------|
| PSYC-210             | LIFESPAN DEVELOPMENT | 3            |
| <b>Total Credits</b> |                      | <b>12-13</b> |

## Health Science – Kinesiology Concentration (11 credit hours)

Students should research graduate programs and career goals when developing their plan of study and work in close consultation with the academic advisor.

| Code                         | Title  | Credits   |
|------------------------------|--|-----------|
| PHYS-103<br>& PHYL-103       | GENERAL PHYSICS I<br>and GENERAL PHYSICS I LAB   | 4         |
| PHYS-104<br>& PHYL-104       | GENERAL PHYSICS II<br>and GENERAL PHYSICS LAB II | 4         |
| Select one of the following: |  | 3         |
| EDUC-210                     | HUMAN DEVELOPMENT & LEARNING                     |           |
| EDUC-250                     | ADOLESCENT DEVELOPMENT & LEARNING                |           |
| PSYC-214                     | ADULT DEVELP & AGING                             |           |
| <b>Total Credits</b>         |  | <b>11</b> |

## Health Science – Biomedical Concentration (10 credit hours)

Students should research graduate programs and career goals when developing their plan of study and work in close consultation with the academic advisor.

| Code                  | Title   | Credits  |
|-----------------------|---|----------|
| BIO-291               | GENETICS                                      | 3        |
| BIO-321<br>& BIOL-321 | GEN. MICROBIOLOGY<br>and Gen Microbiology Lab | 4        |
| BIOL-321              | Gen Microbiology Lab                          | 0        |
| <b>Total Credits</b>  |   | <b>7</b> |

## Graduation Requirements for Health Science

All degree requirements must be completed satisfactorily to graduate. These include:

- Application for Graduation and Degree Audit (Registrar)
- 2.0 GPA overall
  - While a 2.0 cumulative GPA is required for graduation, students should note that admission to graduate programs in Allied Health are very competitive often requiring a cumulative GPA of 3.0 or better.

Students should select courses and sequence in close consultation with the academic advisor.

| First Year                                  |         |   |         |
|---|---------|---|---------|
| Fall  | Credits | Spring                                      | Credits |
| BONA-101                                    | 3       | ENG-102                                     | 3       |
| ENG-101                                     | 3       | HS-107                                      | 3       |
| HS-101                                      | 3       | HS-102                                      | 1       |
| THFS-101                                    | 3       | PHIL-104                                    | 3       |
| Take 1 science with lab from options below: | 4       | Take 1 science with lab from options below: | 4       |

| CHEM-101<br>& CHML-101                      | CHEM-102<br>& CHML-102 |   |           |
|---|------------------------|---|-----------|
| BIO-105<br>& BIOL-105                       | BIO-106<br>& BIOL-106  |   |           |
|   |                        | <b>16</b>                                     | <b>14</b> |
| Second Year                                 |                        |   |           |
| Fall  | Credits                | Spring  | Credits   |
| BIO-211<br>& BIOL-211 <sup>1</sup>          |                        | 4 HS-201                                      | 3         |
| PSYC-101                                    |                        | 3 BIO-212<br>& BIOL-212                       | 4         |
| MATH-107 or 117                             |                        | 3 Historical Studies Distribution             | 3         |
| General Elective                            |                        | 3 General Elective                            | 3         |
| Take 1 science with lab from options below: |                        | 4 Take 1 science with lab from options below: | 4         |
| CHEM-101<br>& CHML-101                      |                        | CHEM-102<br>& CHML-102                        |           |
| BIO-105<br>& BIOL-105                       |                        | BIO-106<br>& BIOL-106                         |           |
|   |                        | <b>17</b>                                     | <b>17</b> |
| Third Year                                  |                        |   |           |
| Fall  | Credits                | Spring  | Credits   |
| HS-301                                      |                        | 3 PHIL-338                                    | 3         |
| HS-309                                      |                        | 3 Franciscan Studies/Theology<br>Distribution | 3         |
| Literature & the VPA Distribution           |                        | 3 Health Science Elective                     | 3         |
| HS Concentration Course                     |                        | 3 General Elective                            | 3         |
| Health Science Elective                     |                        | 3 HS Concentration Course                     | 3         |
|   |                        | <b>15</b>                                     | <b>15</b> |
| Fourth Year                                 |                        |   |           |
| Fall  | Credits                | Spring  | Credits   |
| HS-413                                      |                        | 3 HS-401                                      | 3         |
| General Elective                            |                        | 8 General Elective                            | 3         |
| HS Concentration Course                     |                        | 3 Health Science Elective                     | 3         |
|   |                        | General Elective                              | 3         |
|   |                        | <b>14</b>                                     | <b>12</b> |
| <b>Total Credits 120</b>                    |                        |   |           |

<sup>1</sup> BIO-331/BIOL-331 may be substituted for BIO-211/BIOL-211 in consultation with advisor.