University Core and Graduation Requirements

### University Core Requirements:

**Religion Cornerstones**
- Teachings and Doctrine of The Book of Mormon: 1 class, 2.0 hours, REL A 275
- Jesus Christ and the Everlasting Gospel: 1 class, 2.0 hours, REL A 250
- Foundations of the Restoration: 1 class, 2.0 hours, REL C 225
- The Eternal Family: 1 class, 2.0 hours, REL C 200

**The Individual and Society**
- American Heritage: 1-2 classes, 3-6.0 hours, from approved list
- Global and Cultural Awareness: 1 class, 3.0 hours, from approved list

**Skills**
- First Year Writing: 1 class, 3.0 hours, from approved list
- Advanced Written and Oral Communications: 1 class, 3.0 hours, ENGL 316 recommended
- Quantitative Reasoning: 0-1 class, 0-3.0 hours, from approved list
- Languages of Learning (Math or Language): 1 class, 3.0 hours, STAT 121*

**Arts, Letters, and Sciences**
- Civilization 1: 1 class, 3.0 hours, from approved list
- Civilization 2: 1 class, 3.0 hours, from approved list
- Arts: 1 class, 3.0 hours, from approved list
- Letters: 1 class, 3.0 hours, from approved list
- Biological Science: 1 class, 3.0 hours, NDFS 100*
- Physical Science: 2 classes, 7.0 hours, CHEM 105*, PHSCS 105*
- Social Science: 1 class, 3.0 hours, from approved list

**Core Enrichment: Electives**
- Religion Electives: 3-4 classes, 6.0 hours, from approved list
- Open Electives: Variable hours, personal choice

*These classes fill both university core and program requirements (15 hours overlap).

### Graduation Requirements:

- Minimum residence hours required: 30.0
- Minimum hours needed to graduate: 120.0

---

### Suggested Sequence of Courses

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>14.0</td>
</tr>
<tr>
<td>2nd Semester</td>
<td>18.0</td>
</tr>
</tbody>
</table>

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester</td>
<td>16.0</td>
</tr>
<tr>
<td>4th Semester</td>
<td>14-16.0</td>
</tr>
</tbody>
</table>

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Semester</td>
<td>14.0</td>
</tr>
<tr>
<td>6th Semester</td>
<td>14.0</td>
</tr>
</tbody>
</table>

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Semester</td>
<td>16.0</td>
</tr>
<tr>
<td>8th Semester</td>
<td>14-16.0</td>
</tr>
</tbody>
</table>

Note: Students are encouraged to complete an average of 15 credit hours each semester or 30 credit hours each year, which could include spring and/or summer terms. Taking fewer credits substantially increases the cost and the number of semesters to graduate.
# BS in Nutritional Science (284325)
## 2018-2019 Program Requirements (60 Credit Hours)

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>Complete 6 courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORE REQUIREMENTS:</strong></td>
<td></td>
</tr>
<tr>
<td>NDFS 100 - Essentials of Human Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>NDFS 200 - Nutrient Metabolism</td>
<td>3.0</td>
</tr>
<tr>
<td>NDFS 294 - Nutrition Research Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>NDFS 305 - Nutritional Implications of Disease</td>
<td>4.0</td>
</tr>
<tr>
<td>NDFS 424 - Nutrition Through the Life Cycle</td>
<td>2.0</td>
</tr>
<tr>
<td>NDFS 435 - Nutritional Biochemistry and Metabolism</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**REQUIREMENT 2:** Complete 7.0 hours from the following course(s)

**COMPLETE 7 HOURS FROM THE FOLLOWING (AT LEAST ONE COURSE MUST BE NDFS 250, 310, OR 400):**

- HLTH 345 - Principles of Epidemiology | 3.0 |
- MMBIO 241 - Molecular and Cellular Biology Laboratory | 1.0 |
- NDFS 250 - Essentials of Food Science | 3.0 |
- NDFS 251 - Essentials of Food Science Laboratory | 1.0 |
- NDFS 310 - Nutrition and Metabolism in Sports and Exercise | 2.0 |
- NDFS 399R - Academic Internship | 9.0v |
- NDFS 400 - Community Nutrition | 3.0 |
- NDFS 494R - Undergraduate Research in Nutrition, Dietetics, or Food Science | 3.0v |
- PDDBIO 360 - Cell Biology | 3.0 |
- PWS 340 - Genetics | 3.0 |

**REQUIREMENT 3:** Complete 1 course

**PREREQUISITE TO PDDBIO 305, REQUIRED BELOW:**

- PDDBIO 210 - Human Anatomy (with virtual lab) | 3.0 |
- PDDBIO 220 - Human Anatomy (with lab) | 3.0 |

**REQUIREMENT 4:** Complete 12 courses

**COMPLETE 1 HOUR OF CHEM 353:**

- CHEM 105 - General College Chemistry 1 with Lab (Integrated) | 4.0 |
- CHEM 106 - General College Chemistry 2 | 3.0 |
- CHEM 107 - General College Chemistry Laboratory | 1.0 |
- CHEM 351 - Organic Chemistry 1 | 3.0 |
- CHEM 352 - Organic Chemistry 2 | 3.0 |
- CHEM 353 - Organic Chemistry Laboratory—Nonmajors | 2.0v |
- CHEM 481 - Biochemistry | 3.0 |
- MMBIO 240 - Molecular Biology | 3.0 |
- PDDBIO 120 - Science of Biology | 3.0 |
- PDDBIO 305 - Human Physiology | 4.0 |
- PHSCS 105 - General Physics 1 | 3.0 |

- *STAT 121 - Principles of Statistics | 3.0 |

**RECOMMENDED:** Complete 7 courses

- CHEM 222 - Quantitative and Qualitative Analysis | 4.0 |
- HLTH 345 - Principles of Epidemiology | 3.0 |
- MMBIO 221 - General Microbiology | 3.0 |
- PDDBIO 363 - Advanced Physiology Laboratory | 1.0 |
- PHSCS 106 - General Physics 1 | 3.0 |
- PHSCS 107 - General Physics Lab 1 | 1.0 |
- PHSCS 108 - General Physics Lab 2 | 1.0 |

**Note:** Professional schools and graduate programs may require additional courses not required for the major, such as Phscs 106, 107, 108, or Math 119 or 112. Students should contact the program to which they may apply to determine the specific courses required.

## THE DISCIpline:

Nutritional Science is the study of the effects of food components on the metabolism, health, performance and disease resistance of human and animals. It also includes the study of human behaviors related to food choices.

## COURSE WORK:

Courses required for the undergraduate major in nutritional science are divided into three areas. The core courses provide a broad foundation in nutritional science. The supporting courses include chemistry, biochemistry, physics, statistics, physiology, biology, and molecular biology. The third area includes the nutritional science electives.

## FINANCING:

Some assistantships and scholarships are offered through the Department of Nutrition, Dietetics, and Food Science. There are also college, university, private, and federal sources for financial help.

## CAREERS:

Graduates with a B.S. in Nutritional Science find employment in major research centers; biotechnology, pharmaceutical, and nutraceutical industries; community nutrition programs; nongovernmental organizations; and the fitness industry.

Other jobs are available with food security advocacy groups (e.g., food banks, anti-poverty organizations), health advocacy organizations (preventing osteoporosis, cancer, or heart disease), trade groups for commodities (citrus fruits, vegetable growers), and people working to increase food security (farmers’ market organizers, Supplemental Nutrition Assistance Programs [formerly called food stamps] as educators or administrators). Specialized skills or training such as laboratory research experience, bilingual proficiency, journalism courses and experience, or service learning with local, national, or international community organizations make students more competitive for these jobs.

Many graduates with a BS in Nutritional Science have gone on to obtain a graduate degree (e.g. MS, MPH, PhD) at institutions such as BYU, Stanford University, the University of Illinois, the University of Utah, Utah State University, and University of Rome Tor Vergata. In addition, Nutritional Science graduates have attended medical schools at Duke, Baylor, and the Mayo Clinic (among many others), dental schools at Ohio State, University of Pittsburgh, and University of the Pacific, as well as schools of osteopathy, pharmacy, podiatry, optometry, physical therapy, and accredited physician assistant programs.

Most nutrition counseling services are provided by Registered Dietitians. Students interested in a career as a nutrition counselor should consider majoring in Dietetics.

## PRACTICAL EXPERIENCE:

Students may participate in research under a professor’s direction. Interested students should familiarize themselves with the professor’s research interests and ongoing projects. Students should approach the professor whose work most interests them to discuss how they can become involved. Students may participate as a volunteer to gain experience, as a paid research assistant, or for academic credit (NDFS 494R - Undergraduate Research). Some students who have taken advantage of this opportunity have presented the results of their research at regional, national, and international scientific meetings and have published their results in peer-reviewed scientific journals.

## MAP DISCLAIMER

While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed
requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

DEPARTMENT INFORMATION

Nutrition, Dietetics and Food Science
Brigham Young University
S-221 Eyring Science Center
Provo, UT 84602
NDFS Dept. Office: (801) 422-3912
Nutrition Advisor: Dr. Chad Hancock
ESC S-249, chad_hancock@byu.edu, 801-422-7588

ADVISEMENT CENTER INFORMATION

Life Sciences Advisement
Brigham Young University
2060 Life Sciences Building
Provo, UT 84602
Telephone: (801) 422-3042
lifesciences@byu.edu

BS in Nutritional Science (284325)
2018-2019