

# B.S. IN HUMAN BIOENERGETICS

Code	Title	Credits
<b>Major in Human Bioenergetics (B.S.)</b>		
<b>Applied Health Science Core</b>		
AHS 100	Foundations in Applied Health Science	1
AHS 170	Applied Nutrition	2
AHS 250M	Statistics and Research Methods in Applied Health Sciences	4
AHS 370	Functional Human Nutrition	4
AHS 375	Functional Anatomy	4
AHS 379	Integrative Human Physiology	4
AHS 393	Literature Review in Applied Health Sciences <sup>1</sup>	2
AHS 398	Physiological Assessment Laboratory <sup>1</sup>	1
AHS 399	Physiological Assessment <sup>1</sup>	3
AHS 445	Advanced Laboratory Techniques in Applied Health Sciences	4
AHS 481	Internship in Applied Health Sciences	2
AHS 494	Research in Applied Health Sciences	1
AHS 495	Applied Health Sciences Symposium	2
<b>Interdisciplinary Core</b>		
Choose two of the following courses:		8
BIO 120 & BIO 120D	Introduction to Molecular and Cellular Biology and Introduction to Molecular and Cellular Biology Lab	
BIO 122 & BIO 122D	Introduction to Organismic Biology and Introduction to Organismic Biology Lab	
BIO 124 & BIO 124D	Integrative Biology: Genes, Cells, Change and Integrative Biology: Genes, Cells, Change Lab	
BIO 128 & BIO 128D	Integrative Biology: Metabolism, Energy, Biodiversity and Integrative Biology: Metabolism, Energy, Biodiversity Lab	
BIO 214 & BIO 215	Human Anatomy and Human Anatomy Lab	4
BIO 216 & BIO 217	Human Physiology and Human Physiology Lab <sup>2</sup>	4
CHE 113 & CHE 113D	General Chemistry and General Chemistry Lab	4
CHE 214 & CHE 215	General Chemistry II and General Chemistry II Lab	4
CHE 224 & CHE 225	Organic Chemistry I and Organic Chemistry I Lab	4
PSY 101	Introduction to Psychology I	2
PSY 102	Introduction to Psychology II	2
Choose 12 credits from the following course sequences:		12
BIO 234 & BIO 235	Microbiology and Microbiology Lab <sup>5</sup>	
BIO 332 & BIO 333	Genetics and Genetics Lab <sup>16</sup>	
BIO 338 & BIO 339	Endocrinology and Endocrinology Lab <sup>6</sup>	

## B.S. in Human Bioenergetics 2

BIO 350	Clinical Pathophysiology <sup>7</sup>
BIO 354 & BIO 355	Cell Biology and Cell Biology Lab <sup>8</sup>
BIO 396 & BIO 397	Molecular Biology and Molecular Biology Lab <sup>9</sup>
CHE 226 & CHE 227	Organic Chemistry II and Organic Chemistry II Lab
CHE 304 & CHE 397	Essentials of Biochemistry and Biochemistry II Lab <sup>10, 11, 14, 18</sup>
or CHE 388 & CHE 389 & CHE 396 & CHE 397	Biochemistry I and Biochemistry I Lab and Biochemistry II and Biochemistry II Lab
MAT 121M	Precalculus
MAT 124M	Calculus I <sup>3</sup>
PHY 202 & PHY 202D	Introductory Physics I and Introductory Physics I Lab <sup>4</sup>
or PHY 292 & PHY 292D	General Physics I and General Physics I Lab
PHY 206 & PHY 207	Introductory Physics II and Introductory Physics II Lab <sup>12, 13, 17</sup>
or PHY 296 & PHY 297	General Physics II and General Physics II Lab
PSY 203 or PSY 300	Lifespan Development Psychopathology

Code	Title	Credits
Major <sup>15</sup>		78
General Education *		40-48
Electives		0-4
<b>Total Credits</b>		<b>122-126</b>

<sup>1</sup> AHS 001 is a prerequisite for this course

<sup>2</sup> BIO 104/BIO 104D, BIO 120/BIO 120D, BIO 124/BIO 124D, NSC 130/NSC 130D, or BIO 218 is a prerequisite for this course.

<sup>3</sup> Placement at MAT 124M on the Math and Computer Science department placement exam; MAT 121M, concurrent enrollment in MAT 122, or equivalent high school or college course(s) is a prerequisite for this course.

<sup>4</sup> MAT 121M or MAT 124M is a prerequisite for this course.

<sup>5</sup> BIO 218 or BIO 120/BIO 120D is a prerequisite for this course.

<sup>6</sup> BIO 218 or NSC 130/NSC 130D or BIO 120/BIO 120D and BIO 122/BIO 122D are prerequisites for this course.

<sup>7</sup> Acceptance into the nursing program or consent of instructor is a prerequisite for this course and NUR 202 and NUR 302 are corequisites for this course.

<sup>8</sup> BIO 332/BIO 333 or BIO 218 (may be taken concurrently) or PSY 101 and NSC 130/NSC 130D are prerequisites for this course.

<sup>9</sup> BIO 124/BIO 124D and BIO 128/BIO 128D are prerequisites for this course.

<sup>10</sup> CHE 226/CHE 227 and BIO 120/BIO 120D or BIO 124/BIO 124D are prerequisites for CHE 388/CHE 389.

<sup>11</sup> Students requiring CHE 397 for their degree will require an override to take this course concurrently with CHE 304.

<sup>12</sup> MAT 125 and PHY 292/PHY 292D are prerequisites for PHY 296/PHY 297.

<sup>13</sup> PHY 202/PHY 202D is a prerequisite for PHY 206/PHY 207.

<sup>14</sup> BIO 120/BIO 120D and CHE 224/CHE 225 or BIO 124/BIO 124D are prerequisites for CHE 304.

<sup>15</sup> Students must earn a C or higher in each course in the major (AHS, BIO, CHE, MAT, PHY, PSY).

<sup>16</sup> BIO 218 (may be taken concurrently) or BIO 124/BIO 124D is a prerequisite for this course.

<sup>17</sup> MAT 124M or Consent of instructor is a prerequisite for this course.

<sup>18</sup> BIO 120/BIO 120D or BIO 124/BIO 124D and CHE 226/CHE 227 are prerequisites for CHE 388/CHE 389.

\* Courses whose number is followed by a letter fulfill a General Education requirement.