










2023 - 2024 Major Map




Applied Nutrition and Health, BS





School/College: College of Health Solutions
NHFNUENBS

This program's name has changed effective Fall 2024. The previous name was Food and Nutrition Entrepreneurship.



Term 1 - A 0 - 7 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CHS 101: The ASU Experience for Health Solutions Students	1		<ul style="list-style-type: none"> ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students. College of Health Solutions students take CHS 101 to fulfill this requirement.
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
MAT course (MA) (MAT 142 recommended)	3	C	
Term hours subtotal:	7		
Term 1 - B 7 - 15 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CHM 101: Introductory Chemistry (SQ)	4	C	<ul style="list-style-type: none"> First-year students must take CHS 100; students who enter with more than 30 hours must take CHS 300 instead. View ASU Online first-year student registration information here. Consider your personal and career interests to choose a Focus Area from the lists below. Select coursework from that Focus Area as directed in future terms.
CHS 100: Optimizing Your Health and Performance (SB) OR			
CHS 300: An Exploration of Well-Being (SB)	3	C	
NTR 150: Introduction to the Professions in Nutrition and Dietetics	1	C	
Term hours subtotal:	8		
Term 2 - A 15 - 22 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 160: Introduction to Anatomy and Physiology (SQ) OR BIO 201: Human Anatomy and Physiology I (SG)	4	C	<ul style="list-style-type: none"> Students following the Pre Dietetics Focus Area and the Community Nutrition Focus Area should take BIO 201. Students following the Food Service Operations Focus Area should take BIO 160. Visit the CHS Student Site for resources, forms, appointment scheduling, internship information, etc.
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Term hours subtotal:	7		
Term 2 - B 22 - 29 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 202: Human Anatomy and Physiology II (SG) OR MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)	4	C	<ul style="list-style-type: none"> Students following the Pre Dietetics Focus Area and the Community Nutrition Focus Area should take BIO 202 and PSY 101.
Elective (PSY 101 OR SOC 101 recommended)	3		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	7		



- Students following the Food Service Operations Focus Area should take MIC 205/206.
- Join a **student club** or professional organization.

Term 3 - A 29 - 35 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 HCD 300: Biostatistics (CS) OR STP 226: Elements of Statistics (CS)	3	C	
 NTR 241: Human Nutrition	3	C	
Term hours subtotal:	6		

Term 3 - B 35 - 41 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 NTR 142: Applied Food Principles	3	C	<ul style="list-style-type: none"> • Develop your skills.
Humanities, Arts and Design (HU)	3		
 Complete First-Year Composition requirement.			
 Complete Mathematics (MA) requirement.			
Term hours subtotal:	6		

Term 4 - A 41 - 50 Credit Hours	Hours	Minimum Grade	Notes
HSC 210: Cultural Aspects of Health (C)	3	C	<ul style="list-style-type: none"> • Select Focus Area Course from the appropriate list below. • Students following the Pre Dietetics Focus Area should take CHS 260 as their focus area course. • Students following the Pre-Dietetics Focus Area should also begin planning for in person CHM 235 laboratory attendance in the summer. Speak to your academic advisor for more information.
NTR 290: Introduction to Evidence-Based Research in Nutrition (L)	3	C	
Focus Area Course	3	C	
Term hours subtotal:	9		

Term 4 - B 50 - 56 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 NTR 341: Medical Nutrition Therapy I OR NTR 345: Development of Healthy Cuisines	3	C	<ul style="list-style-type: none"> • Students following the Pre Dietetics Focus Area should take NTR 341. • Students following the Community Nutrition Focus Area and the Food Service Operations Focus Area should take NTR 345. • Secure a part-time job or volunteer experience.
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Term hours subtotal:	6		

Term 5 - A 56 - 62 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 NTR 351: Nutrition Communication (L)	3	C	<ul style="list-style-type: none"> • Select Focus Area Course from the appropriate list below. • Students following the Pre Dietetics Focus Area should take CHM 231/235 for the Focus Area course. Students will complete all experiments for the CHM 235 Elementary Organic Chemistry Lab in person at an ASU campus during a one-week session in summer. Lab reports will be completed in
Focus Area Course	3	C	
Term hours subtotal:	6		

subsequent weeks during the same summer term. Connect with your academic advisor for more information.

Term 5 - B 62 - 68 Credit Hours	Hours	Minimum Grade	Notes
MKT 390: Essentials of Marketing OR MKT 391: Essentials of Selling OR MKT 395: Essentials of Advertising and Marketing Communication	3	C	<ul style="list-style-type: none"> Develop your professional online presence.
NTR 348: Cultural Aspects of Food (SB & C & G)	3	C	
Term hours subtotal:	6		
Term 6 - A 68 - 74 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division Focus Area Course	3	C	<ul style="list-style-type: none"> Select a focus area course from the appropriate list below. Students following the Pre Dietetics Focus Area should take BCH 361 for the Focus Area course.
NTR 350: Nutrition Counseling	3	C	
Term hours subtotal:	6		
Term 6 - B 74 - 80 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ HSC 355: Eating for Lifelong Health (SB) OR NTR 450: Nutrition in the Life Cycle (SB)	3	C	<ul style="list-style-type: none"> Students following the Pre Dietetics Focus Area should take NTR 450. Use Handshake to research employment opportunities.
Elective	3		
★ Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
Term hours subtotal:	6		
Term 7 - A 80 - 86 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ NTR 344: Nutrition Management and Leadership (L)	3	C	
Elective	3		
Term hours subtotal:	6		
Term 7 - B 86 - 92 Credit Hours	Hours	Minimum Grade	Notes
Focus Area Course	3	C	<ul style="list-style-type: none"> Select a focus area course from the appropriate list below. Students following the Pre Dietetics Focus Area should take MIC 205/206 for the Focus Area course. Gather professional references.
Upper Division Elective	3		
Term hours subtotal:	6		
Term 8 - A 92 - 98 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ NTR 448: Community Nutrition (L)	3	C	<ul style="list-style-type: none"> NTR 448 fulfills the college's experiential learning requirement.
Elective	3		
Term hours subtotal:	6		
Term 8 - B 98 - 104 Credit Hours	Hours	Minimum Grade	Notes
Upper Division Focus Area Course	3	C	<ul style="list-style-type: none"> Select a focus area course from the appropriate list below. Students following the Pre Dietetics Focus Area should take NTR 343 for the Focus Area course.
Upper Division Elective	3		
Term hours subtotal:	6		

Term 9 - A 104 - 110 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ NTR 402: Preprofessional Prep in Nutrition Careers	1	C	
Upper Division Elective	2		
Elective	3		
Term hours subtotal:	6		

Term 9 - B 110 - 116 Credit Hours	Hours	Minimum Grade	Notes
Upper Division Focus Area Course	3	C	
Upper Division Elective	3		
Term hours subtotal:	6		<ul style="list-style-type: none"> • Select a focus area course from the appropriate list below. • Students following the Pre Dietetics Focus Area should take NTR 445 for the Focus Area course.

Term 10 - A 116 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Elective	4		
Term hours subtotal:	4		<ul style="list-style-type: none"> • Apply for full-time career opportunities

- Students should select and follow a Focus Area to complete a total of 18 credit hours, at least nine of which must be upper division. The selected focus area will allow students to move confidently into a career or a Graduate Program in Dietetics.
- Students following the Pre Dietetics Focus Area will be eligible to apply to a Graduate Program in Dietetics which integrates the required coursework and experiential learning to prepare students for the Registered Dietitian (RD) exam. Upon passing the RD Exam, graduates can work as Registered Dietitian Nutritionists (RDN). For more information about institutions that offer a Graduate Program in Dietetics, please visit:
<https://www.eatrightpro.org/acend/accredited-programs/accredited-programs-directory> and search for *Graduate Programs* which are available in several states and online.
- The Pre Dietetics Focus Area requires both BIO 202 and MIC 205/206. BIO 202 should be completed before MIC 205/206. Students should follow term notes with course suggestions.
- For students following the Pre Dietetics Focus Area, the CHM 235 Elementary Organic Chemistry Laboratory is only offered in-person at a university campus location. This laboratory course will be offered during summer which may impact your financial aid. **Learn** more about summer financial aid and additional ways to cover summer costs. Students also have the option to complete the laboratory at a local institution. Visit the **Transfer Credit Guide** to find equivalent courses near you and consult with your academic advisor.

Hide Course List(s)/Track Group(s)

Community Nutrition Focus Area	Pre Dietetics Focus Area	Food Service Operations Focus Area
CHS 340: Health Theory	BCH 361: Advanced Principles of Biochemistry	AGB 215: Fundamentals of Sustainable Food Systems (L) or SFS 215: Fundamentals of Sustainable Food Systems (L) or SOS 215: Fundamentals of Sustainable Food Systems (L)
EXW 446: Worksite Wellness	CHM 231: Elementary Organic Chemistry (SQ) AND CHM 235: Elementary Organic Chemistry Laboratory (SQ)	AGB 425: Food Supply Networks
HCD 332: Population Health Policy and Legislation	CHS 260: Health Professions Terminology	AGB 445: Food Retailing
HCR 231: Fundamentals of Community Health		AGB 456: Food Product Innovation and Development
HCR 335: Program Development and Management for Community Health		

HEP 102: Foundations of Health Education and Health Promotion	BIO 202: Human Anatomy and Physiology II (SG) or MIC 205: Microbiology (SG)	CIS 105: Computer Applications and Information Technology (CS)
HEP 348: Methods of Health Education	AND MIC 206: Microbiology Laboratory (SG)	HCR 494: Food Safety and Protection
HEP 380: Body Image and Wellness	NTR 343: Food Service Purchasing	MGT 380: Management and Strategy for Nonmajors
HEP 444: Epidemiology	NTR 445: Management of Food Service Systems	NTR 343: Food Service Purchasing
HEP 452: Health Advocacy in Health Education		NTR 353: The Western Diet
NTR 453: Nutrition and the Media		NTR 360: Nutrition Entrepreneurship
PBH 422: Health Disparities and Access to Health		NTR 445: Management of Food Service Systems
PBH 435: Environmental and Occupational Health		NTR 455: Retail Food Service Operations
POP 100: Introduction to Population Health		SOS 327: Sustainable Food and Farms

Notes:

- First-Year Composition: All students are placed in ENG 101 unless submission of SAT, ACT, Accuplacer, IELTS, or TOEFL score, or college-level transfer credit or test credit equivalent to ASU's first-year composition course(s), determine otherwise. Students on Polytechnic, Downtown Phoenix and West Campuses are encouraged to complete the Directed Self-Placement survey to choose the first-year composition option they believe best suits their needs. Visit: <https://cisa.asu.edu/DSP>
- Mathematics Placement Assessment score determines placement in first mathematics course.

Total Hours: 120

Upper Division Hours: 45 minimum

Major GPA: 2.00 minimum

Cumulative GPA: 2.00 minimum

Total hrs at ASU: 30 minimum

Hrs Resident Credit for

Academic Recognition: 56 minimum

Total Community College Hrs: 64 maximum

General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed next to courses on the major map were valid for the 2023 - 2024 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.