

Health Sciences – A.S. Degree Program

The A.S. degree program in Health Sciences provides the pre-professional training (the first two years) for a broad spectrum of baccalaureate majors in the Health Sciences. Core course distributions meet transfer articulation requirements of specific Bachelor's degree programs. Students should consult faculty advisers in the Department of Biological Sciences and Geology (M-213) for advisement. Refer to the Department of Biological Sciences for the requirements for articulation agreements. Students should be aware that completing the Associate in Science in Health Sciences degree does not guarantee admission to the articulated programs. Admission to these programs is highly competitive. The requirements for admission may include a specified grade point average for the degree or for certain courses, a personal interview, or a practical examination. For the admissions requirements of specific articulated programs, students must consult the advisers in each area.

Students planning to pursue baccalaureate studies in the following programs should select courses according to articulation agreements found on the following pages.

ARTICULATED HEALTH SCIENCE BACCALAUREATE PROGRAMS

1. COMMUNITY HEALTH EDUCATION

B.S. Degree Program – York College

2. DIETETICS, FOODS AND NUTRITION

B.S. Degree Program – Lehman College

3. HEALTH EDUCATION AND PROMOTION

B.S. Degree Program – Lehman College

4. HEALTH SERVICES ADMINISTRATION

B.S. Degree Program – Lehman College

5. MEDICAL LABORATORY SCIENCES

B.S. Degree Program – Hunter College

6. MEDICAL TECHNOLOGY

B.S. Degree Program – York College

7. OCCUPATIONAL THERAPY

B.S. Degree Program – York College

8. PHYSICIAN ASSISTANT PROGRAM

B.S. Degree Program – CUNY Medical School / Harlem Hospital Center

9. DIAGNOSTIC MEDICAL SONOGRAPHY

B.S. Degree Program – SUNY at Downstate

10. HEALTH AND NUTRITION SCIENCES

B.S. Degree Program – Brooklyn College

11. HEALTH SCIENCES –

Articulation with Mercy College to a B.S. Degree in Health Sciences leading to M.S. program in Occupational Therapy, Physical Therapy and Physician Assistant.

REQUIREMENTS FOR THE ASSOCIATE IN SCIENCE (A.S.) DEGREE IN HEALTH SCIENCES

A. LIBERAL ARTS AND SCIENCES CORE

Credits

English Composition I, II (EN-101, 102).....	6
Foreign Language <i>and/or</i>	
Liberal Arts and Sciences <i>and/or</i> Speech*.....	6-8
Social Science (SS-510§, Psychology).....	3
History***	3
Social Sciences, History, or Humanities elective ††.....	3
Mathematics (MA-336§ or MA-440) §§	3-4
Laboratory Sciences**	
(BI-201§, 202 and CH-127 or CH-151) §§	12 1/2

Sub-total 36 1/2-39 1/2

B. REQUIRED COURSE DISTRIBUTION

Course distributions for each field are listed in the transfer articulations. †

20 1/2-23 1/2	
The courses listed below are recommended as pre-professional preparation. ‡	
Organization and Delivery of Health Care (BI-150).....	2
The Health of the Nation (IS-151)	2
Computers in Health Science (BI-558) or Scientific Use of Computers (PH-303) or an equivalent computer applications course††	2

Total Credits Required60

* In consultation with a faculty adviser, students will select Foreign Language courses and/or Liberal Arts and Sciences courses and/or Speech (SP-211) as appropriate to their intended majors. Courses from which students may choose are: BI-100 series, BI-201, BI-202, BI-235, BI-301, BI-302, BI-311, BI-320, BI-461, BI-501, BI-503, BI-503, BI-510, BI-520, or BI-525; any CH course; EN-201 through EN-816; any LF course, LG course, LI course, LC course, LS-11 through LS-614 or LS-800 series; any CS course, any MA-300 series, 400 series, or 800 series; MU-100 series; PH-100 series, PH-201 through PH-231, PH-300 series or PH-400 series; any SS course; SP-211 through SP-536; any HI course; PE-711; IS-101, IS-151, or IS-800.

*** In consultation with a faculty advisor, students may select one history course from among the history offerings.

†† In consultation with a faculty advisor, students may select one course from among the following: AR-300 series; PE-711; EN-200 series through EN-816; any LC course, any LF course, any LG course, any LH course, any LI course, LS-111 through LS-614, or LS-800 series; IS-800; MU-100 series; any SS course; any HI course; SP-211 through SP-536.

§ Sections of this course denoted as "WI" may be taken to partially satisfy the Writing Intensive Requirement.

§§ Students planning to continue their studies in the baccalaureate programs indicated in the articulation agreements should be guided by those articulations. Students planning to continue their studies in other baccalaureate programs in the Health Sciences must seek advisement from faculty advisers in the Biological Sciences and Geology Department.

** Students taking CH-152 as part of the Required Course Distribution must take CH-151.

† Students planning to continue their studies in the baccalaureate programs indicated in the articulation agreements should be guided by those articulations. Students planning to continue their studies in other baccalaureate programs in the Health Sciences must seek advisement from faculty advisers in the Biological Sciences and Geology Department. Courses from which students may choose are: AR-310; BI-150, BI-151, BI-235, BI-250, BI-311, BI-403, BI-421, BI-461, BI-510, BI-550, BI-551, BI-558; BU-101, BU-201, BU-500; CH-127, CH-128, CH-151, CH-152, CH-251, CH-252; CS-100; EN-401, EN-402, EN-444, EN-445; ET-501; HE-103, HE-105, HE-106, HE-110, HE-111; IS-151, IS-210, IS-220; MA-336, MA-440, MA-441; MU-110, MU-271, MU-272; PE-441, PE-530; PH-301, PH-302, PH-303; SS-110, SS-211, SS-310, SS-520, SS-525, SS-530, SS-570.

‡ Where the content of these courses is covered by courses required at the senior college, BI-150, IS-151 and/or BI-558 will be omitted from Required Course Distribution.

†† CS-100, BU-500, ET-501 or PH-303 will also fulfill the computer applications course requirement.

Two (2) Writing Intensive classes are required for the Associate degree. See page 69.

ARTICULATIONS FOR THE A.S. DEGREE PROGRAM IN HEALTH SCIENCES

1. COMMUNITY HEALTH EDUCATION –

Articulation with York College B.S. Degree Program

A. Liberal Arts and Sciences Courses	<i>Credits</i>
English Composition and Literature (EN-101, 102).....	6
Foreign Language and/or Liberal Arts and Sciences.....	6-8
Social Sciences (SS-510, Psychology)	3
Introduction to Ancient Civilization (HI-110) <i>or</i> Introduction to Modern Western Civilization (HI-112).....	3
Introductory Survey of Art (AR-310) <i>or</i> Introduction to Music (MU-110).....	3
Computer-Assisted Statistics (MA-336).....	3
General Biology I (BI-201) and General Biology II (BI-202).....	8
General Chemistry I (CH-151)	4 1/2
<i>Sub-total</i>	<i>36 1/2-38 1/2</i>

B. Required Distribution Core for students transferring into the Community Health Education Program

Human Anatomy (BI-235)	4
Nutrition and Health (HE-103).....	3
Human Sexuality (HE-105)	3
Human Growth and Development (SS-520).....	3
Anthropology (SS-110).....	3
Advised electives required to reach 60 credit minimum*†	5 1/2
<i>Sub-total</i>	<i>21 1/2-23 1/2</i>

Total required credits.....60

2. DIETETICS, FOODS & NUTRITION – Articulation with Lehman College B.S. Degree Program

A. Liberal Arts and Sciences Courses	<i>Credits</i>
English Composition and Literature (EN-101, 102).....	6
Foreign Language/Liberal Arts and Sciences.....	3
General Biology I (BI-201) and General Biology II (BI-202).....	8
Introductory College Chemistry (CH-127) <i>and</i>	9
Introductory Organic Chemistry (CH-128).....	9
Computer Assisted Statistics (MA-336) <i>or</i> Pre-Calculus Mathematics (MA-440).....	3-4
Social Sciences (SS-510, Psychology)	3
History	3
Social Sciences, History or Humanities.....	3
<i>Sub-total</i>	<i>38-39</i>

B. Required Distribution Core for students transferring into the Community Health Program

Organization and Delivery of Health Care (BI-150).....	2
The Health of the Nation (IS-151)	2
Nutrition and Health (HE-103).....	3
Human Anatomy (BI-235)	4
Human Physiology (BI-421).....	4
Microbiology (BI-311).....	4
Computers in Health Science (BI-558) †.....	1-3
<i>Sub-total</i>	<i>21-22</i>

Total required credits.....60

* Recommended courses include English Literature I: Anglo-Saxon Period through the 18th Century (EN-401); English Literature II: 19th Century to Present (EN-402); World Literature I: Ancient through Renaissance (EN-444); World Literature II: Masterpieces from the 18th to the 20th Centuries (EN-445); Computers in Health Science (BI-558).

3. HEALTH EDUCATION AND PROMOTION –

Articulation with Lehman College B.S. Program

A. Liberal Arts and Sciences Courses	<i>Credits</i>
English Composition and Literature (EN-101, 102).....	6
Foreign Language/Liberal Arts and Sciences.....	6-8
General Biology I (BI-201) <i>and</i> General Biology II (BI-202).....	8
Introductory College Chemistry (CH-127).....	4 1/2
Computer Assisted Statistics (MA-336) <i>or</i> Pre-Calculus Mathematics (MA-440).....	3-4
Social Science (SS-510 Psychology).....	3
History	3
Social Sciences, History or Humanities.....	3
<i>Sub-total</i>	<i>36 1/2-39 1/2</i>

B. Required Distribution Core for students transferring into the Health Education Program

Organization and Delivery of Health Care (BI-150).....	2
The Health of the Nation (IS-151)	2
Human Anatomy (BI-235)	4
Human Physiology (BI-421).....	4
Microbiology (BI-311).....	4
Nutrition and Health (HE-103).....	3
Computers in Health Science (BI-558) †.....	1-3
Advised elective to reach 60 credits.....	0-2
<i>Sub-total</i>	<i>20 1/2-23 1/2</i>

Total required credits.....60

4. HEALTH SERVICES ADMINISTRATION –

Articulation with Lehman College B.S. Program

A. Liberal Arts and Sciences Courses	<i>Credits</i>
English Composition and Literature (EN-101, 102).....	6
Foreign Language/Liberal Arts <i>and</i> Sciences.....	6-8
General Biology I (BI-201) <i>and</i> General Biology II (BI-202).....	8
Introductory College Chemistry (CH-127).....	4 1/2
Computer Assisted Statistics (MA-336).....	3
Psychology (SS-510).....	3
History	3
Introduction to Macroeconomics (SS-211).....	3
<i>Sub-total</i>	<i>36 1/2-38 1/2</i>

B. Required Distribution Core for students transferring into the Health Services Administration Program

Organization and Delivery of Health Care (BI-150).....	2
The Health of the Nation (IS-151)	2
Computers in Health Science (BI-558) <i>or</i> Introduction to Computer Applications (BU-500) †.....	2-3
Principles of Accounting I (BU-101).....	4
Business Organization and Management (BU-201)	3
Human Growth and Development (SS-520).....	3
Advised electives to reach 60 credits.....	5-8
<i>Sub-total</i>	<i>21 1/2-23 1/2</i>

Total required credits.....60

† The computer applications course requirement may be fulfilled by BI-558, PH-303, CS-100, BU-500, or ET-501.



**5. MEDICAL LABORATORY SCIENCES –
Articulation with Hunter College B.S. Program**

A. Liberal Arts and Sciences Courses	<i>Credits</i>
English Composition and Literature I, II (EN-101, 102)	6
Human Physiology (BI-421)	4
Computer-Assisted Statistics (MA-336)	3
General Biology I, II (BI-201, 202) ¹	8
General Chemistry I, II (CH-151, 152)	9
Psychology (SS-510)	3
Introduction to Medieval and Early Modern Western Civilization (HI-111) ²	3
Social Science, History or Humanities ³	3
<i>Sub-total</i> 39	

B. Required Distribution Core for students transferring into the Medical Laboratory Technology Program	
Histological Technique (BI-411)	4
General Microbiology (BI-461) or College Physics I (PH-301) ⁴	4
Organic Chemistry I, II (CH-251, 252)	10
Advised electives	3
<i>Advised electives may include:</i>	
The Health of the Nation (IS-151) ⁵	2
Computers in Health Science (BI-558) †	2
<i>Sub-total (minimum)</i> 21	

Total required credits.....60

1 fulfills Hunter College Pluralism and Diversity requirement, area 3
 2 fulfills Hunter College Pluralism and Diversity requirement, area 4
 3 This course should include ones that fulfill areas 1 and 2 of the Pluralism and Diversity requirement. See Hunter College Undergraduate Catalog.
 4 Students taking General Microbiology (BI-461) will still be required to take Hunter College's 2 semester Microbiology sequence.
 5 fulfills the Health Core requirement of Hunter College's Medical Laboratory Sciences Program

† The computer applications course requirement may be fulfilled by BI-558,

**6. MEDICAL TECHNOLOGY –
Articulation with York College B.S. Program**

A. Liberal Arts and Sciences Courses	<i>Credits</i>
English Composition and Literature I, II (EN-101, 102)	6
College Physics I, II (PH-301, PH-302)	8
Computer Assisted Statistics (MA-336) or Pre-Calculus Mathematics (MA-440)	3-4
General Biology I, II (BI-201, 202) and General Chemistry I (CH-151)	12 1/2
Psychology (SS-510)	3
Introduction to Ancient Civilization (HI-110) or Introduction to Modern Western Civilization (HI-112)	3
Anthropology (SS-110)	3
<i>Sub-total</i> 38 1/2-39 1/2	

B. Required Distribution Core for students transferring into the Medical Technology Program	
The Health of the Nation (IS-151)	2
Histological Technique (BI-411)	4
General Microbiology (BI-461)	4
Diagnostic Microbiology (BI-470)	4
General Chemistry (CH-152)	4 1/2
Advised electives	2+
<i>Advised electives may include:</i>	
Organization and Delivery of Health Care (BI-150)	2
Computers in Health Science (BI-558) †	1-3
The Medical Laboratory Technologist (BI-400)	2
<i>Sub-total</i> 20 1/2-21 1/2	

Total required credits.....60

**7. OCCUPATIONAL THERAPY –
Articulation with York College B.S. Program**

A. Liberal Arts and Sciences Courses	<i>Credits</i>
English Composition and Literature I, II (EN-101, 102)	6
Introductory Survey of Art (AR-310) or Introduction to Music (MU-110)	3
Computer-Assisted Statistics (MA-336)	3
General Biology I, II (BI-201, 202)	8
General Chemistry I (CH-151)	4 1/2
Psychology (SS-510)	3
Human Growth and Development (SS-520)	3
Introduction to Ancient Civilization (HI-110) or Introduction to Modern Western Civilization (HI-112)	3
Sociology (SS-310)	3
<i>Sub-total</i> 36 1/2	

B. Required Distribution Core for students transferring into the Occupational Therapy Program	
Health Science Field Internship (BI-550, 551)	4
General Chemistry II (CH-152)	4 1/2
Psychology of Personal Adjustment (SS-525)	3
Abnormal Psychology (SS-530)	3
Psychology of Aging (SS-570)	3
Organization and Delivery of Health Care (BI-150)	2
The Health of the Nation (IS-151)	2
Computers in Health Science (BI-558) †	1-3
<i>Sub-total</i> 23 1/2	

Total required credits.....60

8. PHYSICIAN ASSISTANT PROGRAM – Articulation with CUNY Medical School/ CCNY-Harlem Hospital Center B.S. Program

A. Liberal Arts and Sciences Courses	Credits
English Composition and Literature (EN-101, EN-102).....	6
Foreign Language/Liberal Arts and Sciences	6-8
Pre-Calculus Mathematics (MA-440).....	4
General Biology I, II (BI-201, 202).....	8
General Chemistry I (CH-151).....	4 1/2
Social Science (SS-510, Psychology).....	3
History	3
Social Sciences, History or Humanities.....	3
<i>Sub-total 37 1/2-39 1/2</i>	

B. Required Distribution Core for students transferring into the Physician Assistant Program

Two of the three courses below.....	4
Organization and Delivery of Health Care (BI-150).....	2
The Health of the Nation (IS-151).....	2
The Professional Physician Assistant (BI-250).....	2
Human Anatomy (BI-235).....	4
Human Physiology (BI-421).....	4
Microbiology (BI-311).....	4
Introductory Organic Chemistry (CH-128).....	4 1/2
Computer Applications Course †.....	1-2
<i>Sub-total 21+</i>	

Total minimum required credits60

9. DIAGNOSTIC MEDICAL IMAGING – Articulation with SUNY-Downstate B.S. Program

A. Liberal Arts and Sciences Courses	Credits
English Composition and Literature I, II (EN-101, 102).....	6
Pre-Calculus Mathematics (MA-440)	4
General Biology I, II (BI-201, 202).....	8
Psychology (SS-510).....	3
Introductory College Chemistry (CH-127) or General Chemistry I (CH-151).....	4 1/2
College Physics I (PH-301).....	4
Electives in Social Sciences, History, or Humanities	3-6
History (HI-110, 111, or 112).....	3
<i>Sub-total 35 1/2-38 1/2</i>	

B. Required Distribution Core for students transferring into the Diagnostic Medical Imaging Program

Anatomy and Physiology I, II (BI-301, 302).....	8
Cardiopulmonary Resuscitation (HE-110).....	1
First Aid and Safety Education (HE-106).....	3
Advised electives.....	9 1/2-12 1/2
Advised electives may include:	
Computer-assisted Statistics (MA-336).....	3
Organization and Delivery of Health Care (BI-150).....	2
The Health of the Nation (IS-151).....	2
College Physics II (PH-302).....	4
Introductory Organic Chemistry (CH-128).....	4 1/2
OR one of the following computer literacy courses:	
Computers in Health Science (BI-558)	
Scientific Use of Computers (PH-303)	
Introduction to Computers and Programming (CS-100)	
Introduction to Microcomputer Applications (BU-500)	
Computer Applications (ET-501)	1-3

Sub-total (minimum) 21 1/2-24 1/2

Total minimum required credits60



**10. HEALTH AND NUTRITION SCIENCES –
Articulation with Brooklyn College B.S. Program**

A. Liberal Arts and Sciences Courses	<i>Credits</i>
English Composition and Literature I, II (EN-101, 102).....	6
General Biology I, II (BI-201, 202).....	8
Foreign Languages/Liberal Arts and Sciences*.....	6-8
Introductory College Chemistry (CH-127).....	4 1/2
Computer-Assisted Statistics (MA-336) or Pre-Calculus Mathematics (MA-440).....	3-4
Psychology (SS-510).....	3
Introduction to Modern Western Civilization (HI-112).....	3
Sociology (SS-310) or American Government and Politics (SS-410) or Introduction to Philosophy (SS-610).....	3
<i>Sub-total 36 1/2-39 1/2</i>	

**B. Required Distribution Core for students
transferring into the Health and Nutrition Sciences Program
with an emphasis on Holistic Health**

Organization and Delivery of Health Care (BI-150).....	2
The Health of the Nation (IS-151).....	2
Human Physiology (BI-421).....	4
Introduction to Holistic Health (IS-210).....	3
Nutrition and Health (HE-103).....	3
<i>Choose one course from the following:</i>	
Biology of Alternative and Complementary Approaches to Health (BI-300)	
Stress Management (HE-111), or Herbs and Nutritional Supplements (IS-220).....	3
Scientific Use of Computers (PH-303) or comparable computer course.....	1-3
Advised electives to reach 60 credits.....	2-6
<i>Advised electives:</i>	
Introduction to Art Therapy (AR-280)	
Biology of Alternative and Complementary Approaches to Health (BI-300)	
Stress Management (HE-111)	
Herbs and Nutritional Supplements (IS-220)	
Music Therapy for Children with Special Needs (MU-271)	
Music Therapy for Adults (MU-272)	
Tai Ji Exercise Tai Chi Chuan (PE-441)	
Yoga I (PE-530)	
<i>Sub-total 20 1/2-23 1/2</i>	

Total minimum required credits60

* **Foreign Languages and/or Liberal Arts and Sciences:** Graduation requirements at Brooklyn College include foreign language proficiency to the level of three years of high school study or three semesters of college study. Students who have completed their foreign language requirements are advised to take courses that fulfill core course requirements at Brooklyn College (SS-310, SS-410, or SS-610) or other liberal arts and sciences courses among the following: Human Anatomy (BI-235), Environmental Health Science (BI-501), History of Health Care (HI-154), Medical Ethics (SS-640), or Speech Communication (SP-211).

**11. HEALTH SCIENCES –
Articulation with Mercy College
to a B.S. Degree programs in Health Sciences
leading to M.S. programs in
Occupational Therapy,
Physical Therapy and
Physician Assistant.**

**DUAL DEGREE PROGRAM B.S. IN HEALTH SCIENCE /
M.S. IN PHYSICAL THERAPY**

QUEENSBOROUGH

A. Liberal Arts and Science Courses

English Comp and Literature (EN-101, 102).....	6
Intro to Art or Music (AR-310 or MU-110).....	3
Pre-Calculus (MA-440).....	4
General Bio I and II (BI-201, 202).....	8
General Chemistry I (CH-151).....	4 1/2
Psychology (SS-510).....	3
Human Growth and Development (SS-520).....	3
History (HI-110 or 112).....	3
Sociology (SS-310).....	3
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37 1/2	

B. Required Distribution

General Chemistry II (CH-152).....	4.5
College Physics I and II (PH-301, 302).....	8
Pharmacology 3 (BI-510).....	3
Abnormal Psychology (SS-530).....	3
Psychology of Aging (SS-570).....	3
Intro to Health Ed (HE-101).....	1
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22 1/2	

Total minimum required credits60



**DUAL DEGREE PROGRAM BS IN HEALTH SCIENCE /
M.P.S. IN PHYSICIAN ASSISTANT**

QUEENSBOROUGH

A. Liberal Arts and Science Courses

English Comp and Literature (EN-101, 102)	6
Intro to Art or Music (AR-310 or MU-110)	3
Pre-Calculus (MA-440).....	4
General Bio I and II (BI-201, 202)	8
General Chemistry I (CH-151)	4 1/2
Psychology (SS-510).....	3
Human Growth and Development (SS-520)	3
History (HI-110 or 112)	3
Sociology (SS-310).....	3
	<i>sub-total 37 1/2</i>

B. Required Distribution

General Chemistry II (CH-152).....	4 1/2
Human Anatomy (BI-235)	4
Human Physiology (BI-421).....	4
Microbiology (BI-311).....	4
Organization and Delivery of Health Care (BI-150)	2
The Health of the Nation (IS-151).....	2
The Professional Physician Assistant (BI-250).....	2
	<i>sub-total 22 1/2</i>

Total minimum required credits60

**DUAL DEGREE PROGRAM B.S. IN HEALTH SCIENCE /
M.S. IN OCCUPATIONAL THERAPY**

QUEENSBOROUGH

A. Liberal Arts and Science Courses

English Comp and Literature (EN-101, 102)	6
Intro to Art or Music (AR-310 or MU-110)	3
Computer based Statistics (MA-336).....	3
General Bio I and II (BI-201, 202)	8
General Chemistry I (CH-151)	4 1/2
Psychology (SS-510).....	3
Human Growth and Development (SS-520)	3
History (HI-110 or 112)	3
Sociology (SS-310).....	3
	<i>sub-total 36 1/2</i>

B. Required Distribution

Anatomy and Physiology I and II (BI-301, 302).....	8
Principles of Physics (PH-101)	4
Pharmacology (BI-510).....	3
Abnormal Psychology (SS-530).....	3
Org. and Delivery of Health Care (BI-150)	2
Health of the Nation (IS-151).....	2
Medical Terminology (BI-403).....	2
	<i>sub-total 24</i>

Total minimum required credits60

