

Pre-Health Professions, Non-Science Major Certificate

The Pre-Health Professions Certificate assists students in preparing for post-baccalaureate, healthcare professional programs.

The certificate is composed of two separate tracks: a track for majors in the College of Natural Sciences, and a track for majors in other colleges across the university. Students must apply online for admission to the certificate through the university-wide portal for transcript recognized certificates.

These one-hour courses introduce students to the core competencies required as a health care professional, assist the student in discerning the appropriate health professional career, and support the student in completing application to professional school.

Students are encouraged to work closely with the Health Professions Office to select healthcare themes relevant to their professional career goals. Some of the courses may contain prerequisites that are in addition to the coursework for the certificate.

Majors in the College of Natural Sciences must seek the Science Major Track.

Non-Science Major Track Requirements

Code	Title	Hours
Hours chosen from:		2
NSC 107J	The Effective Health Care Professional	
NSC 107K	Thriving in a Collaborative Healthcare Environment	
NSC 107M	Introduction to the Health Professions Action Plan	
Health Professions Preparation Sequences		
Hours chosen from: one of the health professions preparation sequences (the 18 hours may be composed of introductory coursework, advanced coursework, or a mixture of the two)		18
	Pre-dental Preparation	
	Pre-medical Preparation	
	Pre-occupational Therapy Preparation	
	Pre-optometry Preparation	
	Pre-physical Therapy Preparation	
	Pre-physician Assistant Preparation	
	Pre-pharmacy Preparation	
	Pre-veterinary Preparation	
Total Hours		20

Pre-dental Preparation

Code	Title	Hours
Introductory Coursework		
BIO 206L	Introductory Laboratory Experiments in Biology	2
BIO 311C	Introductory Biology I	3
BIO 311D	Introductory Biology II	3
CH 204	Introduction to Chemical Practice	2
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics	3

PHY 102M	Laboratory for Physics 302K	1
PHY 102N	Laboratory for Physics 302L	1
Advanced Coursework		
BCH 369	Fundamentals of Biochemistry	3
MBS 320	Cell Biology	3
BIO 325	Genetics	3
MBS 326R	General Microbiology	3
CH 220C	Organic Chemistry Laboratory	2
CH 320M	Organic Chemistry I	3
CH 320N	Organic Chemistry II	3

Pre-medical Preparation

Code	Title	Hours
Introductory Coursework		
BIO 206L	Introductory Laboratory Experiments in Biology	2
BIO 311C	Introductory Biology I	3
BIO 311D	Introductory Biology II	3
CH 204	Introduction to Chemical Practice	2
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics	3
PHY 102M	Laboratory for Physics 302K	1
PHY 102N	Laboratory for Physics 302L	1
Advanced Coursework		
BCH 369	Fundamentals of Biochemistry	3
MBS 320	Cell Biology	3
BIO 325	Genetics	3
MBS 326R	General Microbiology	3
CH 220C	Organic Chemistry Laboratory	2
CH 320M	Organic Chemistry I	3
CH 320N	Organic Chemistry II	3

Pre-occupational Therapy Preparation

Code	Title	Hours
Introductory Coursework		
BIO 311C	Introductory Biology I	3
BIO 311D	Introductory Biology II	3
BIO 206L	Introductory Laboratory Experiments in Biology	2
CH 204	Introduction to Chemical Practice	2
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 102M	Laboratory for Physics 302K	1
Advanced Coursework		
BIO 325	Genetics	3
INB 446L	Human Microscopic and Gross Anatomy	4
INB 365S	Human Systems Physiology	3
INB 165U	Human Systems Physiology Laboratory	1

Pre-optometry Preparation

Code	Title	Hours
Introductory Coursework		
BIO 311C	Introductory Biology I	3
BIO 311D	Introductory Biology II	3
BIO 206L	Introductory Laboratory Experiments in Biology	2

CH 204	Introduction to Chemical Practice	2
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 102M	Laboratory for Physics 302K	1
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics	3
PHY 102N	Laboratory for Physics 302L (a completed calculus-based physics sequence may substitute for the purpose of earning the certificate)	1

Advanced Coursework

BCH 369	Fundamentals of Biochemistry	3
BIO 325	Genetics	3
MBS 326R	General Microbiology	3
MBS 226L	General Microbiology Laboratory	2
INB 446L	Human Microscopic and Gross Anatomy	4
INB 365S	Human Systems Physiology	3
INB 165U	Human Systems Physiology Laboratory	1
CH 320M	Organic Chemistry I	3
CH 320N	Organic Chemistry II	3
CH 220C	Organic Chemistry Laboratory	2

Pre-physical Therapy Preparation

Code	Title	Hours
Introductory Coursework		
BIO 311C	Introductory Biology I	3
BIO 311D	Introductory Biology II	3
BIO 206L	Introductory Laboratory Experiments in Biology	2
CH 204	Introduction to Chemical Practice	2
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 102M	Laboratory for Physics 302K	1
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics	3
PHY 102N	Laboratory for Physics 302L (a completed calculus-based physics sequence may substitute for the purpose of earning the certificate)	1

Advanced Coursework

BIO 325	Genetics	3
INB 446L	Human Microscopic and Gross Anatomy	4
INB 365S	Human Systems Physiology	3
INB 165U	Human Systems Physiology Laboratory	1

Pre-physician Assistant Preparation

Code	Title	Hours
Introductory Coursework		
BIO 311C	Introductory Biology I	3
BIO 311D	Introductory Biology II	3
BIO 206L	Introductory Laboratory Experiments in Biology	2
CH 204	Introduction to Chemical Practice	2
NTR 306	Fundamentals of Nutrition	3
Advanced Coursework		
BCH 369	Fundamentals of Biochemistry	3
MBS 320	Cell Biology	3
BIO 325	Genetics	3
MBS 226L	General Microbiology Laboratory	2
MBS 326R	General Microbiology	3

MBS 344	Molecular Biology	3
INB 446L	Human Microscopic and Gross Anatomy	4
INB 365S	Human Systems Physiology	3
INB 165U	Human Systems Physiology Laboratory	1
CH 320M	Organic Chemistry I	3
CH 320N	Organic Chemistry II	3
CH 220C	Organic Chemistry Laboratory	2

Pre-pharmacy Preparation

Code	Title	Hours
Introductory Coursework		
BIO 311C	Introductory Biology I	3
BIO 311D	Introductory Biology II	3
BIO 206L	Introductory Laboratory Experiments in Biology	2
CH 204	Introduction to Chemical Practice	2
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 102M	Laboratory for Physics 302K (a completed calculus-based physics sequence may substitute for the purpose of earning the certificate) ¹	1

Advanced Coursework

BIO 325	Genetics	3
MBS 226L	General Microbiology Laboratory	2
MBS 326R	General Microbiology	3
INB 446L	Human Microscopic and Gross Anatomy	4
INB 365S	Human Systems Physiology	3
INB 165U	Human Systems Physiology Laboratory	1
CH 320M	Organic Chemistry I	3
CH 320N	Organic Chemistry II	3
CH 220C	Organic Chemistry Laboratory	2

Pre-veterinary Preparation

Code	Title	Hours
Introductory Coursework		
BIO 311C	Introductory Biology I	3
BIO 311D	Introductory Biology II	3
BIO 206L	Introductory Laboratory Experiments in Biology	2
CH 204	Introduction to Chemical Practice	2
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 105M	Laboratory For Physics 302K, 303K, and 317K	1
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics	3
PHY 102N	Laboratory for Physics 302L (a completed calculus-based physics sequence may substitute for the purpose of earning the certificate)	1

Advanced Coursework

BCH 369	Fundamentals of Biochemistry	3
BIO 325	Genetics	3
MBS 326R	General Microbiology	3
MBS 226L	General Microbiology Laboratory	2
MBS 344	Molecular Biology	3
CH 320M	Organic Chemistry I	3
CH 320N	Organic Chemistry II	3

SDS 321	Introduction to Probability and Statistics	3
or SDS 320E	Elements of Statistics	

Additional Requirements and Policy

- The certificate consists of a minimum of 20 hours, including nine hours in residence. Each course presented for the certificate must be completed with a grade of at least C-.
- Students must complete two of the three NSC 107J, NSC 107K, or NSC 107M courses managed by the Health Professions Office to receive the certificate. It is recommended that all three NSC 107J/NSC 107K/NSC 107M courses be taken.
- Majors outside of the College of Natural Sciences must seek the Non-Science Major Track.
- The composition of the non-science major track is science coursework necessary for admission to post-baccalaureate, healthcare professional programs.
- Non-science majors may apply to the certificate program upon completion of the following courses with grades of at least B-: CH 301 or CH 302, and one of the following: SDS 302F, M 408C, M 408K, M 408N, M 408R, EDP 308, or PSY 317L.
- Upon admission, the ability to progress in the certificate is dependent on completion of the certificate courses with satisfactory grades.