

Pre-Allied Health Program Student Handbook



Physical Therapy

Occupational Therapy

Diagnostic Imaging

Nursing

Bioscience Technologies

Emergency Medical Service

<http://GENIUS.rider.edu/~wwwbio>

Pre-Allied Health at Rider University

The Rider University Pre-Allied Health Program is designed for biology majors seeking to obtain the necessary prerequisites for application to a professional program in physical therapy, occupational therapy, diagnostic imaging, nursing, medical technology, cytotechnology, cytogenetic technology, or biotechnology.

Students may choose to transfer to a professional school after completion of two or three years of study at Rider (prior to receiving a degree). Alternately, students may complete the requirements for a B.S. in Biology prior to their transfer.

Students interested in this program should speak with the Pre-Allied Health Advisor at Rider prior to the completion of their freshman year.

Rider's Partnership with Thomas Jefferson University

Thomas Jefferson University, founded in 1824, is one of the leading academic health centers in the nation. The University contains three colleges: Jefferson Medical College, the College of Graduate Studies, and the College of Health Professions.

Jefferson's College of Health Professions is an upper-division institution. This means that students begin their studies at another accredited college or university, then transfer to Jefferson. Rider and Jefferson have prepared a signed transfer agreement that formalizes their partnership. Although this agreement does not guarantee admission of Rider students into Jefferson's programs, it does mean that Rider faculty members are familiar with Jefferson's academic requirements. In addition, Rider and Jefferson faculty and administrators maintain open lines of communication in regard to updated information and developments.



There are many options for careers and programs in Allied Health. Students who are interested should contact the Allied Health advisor in the department of biology at Rider University, as well as the specific programs at Jefferson University or other Allied Health institutions, for more information regarding ...

- ❖ Allied Health career specialties
- ❖ Admission requirements
- ❖ The Rider-TJU Affiliate Agreement
- ❖ Pre-requisite course requirements
- ❖ Job prospects
- ❖ Campus life at Rider and TJU
- ❖ The PACE program

Contact Information

Rider University

Dr. Todd Weber, Allied Health Advisor
Dept. of Biology
Rider University
2083 Lawrenceville Road
Lawrenceville, NJ 08648
(609) 896-5028
tweber@rider.edu

Thomas Jefferson University

Office of Admissions
College of Health Professions
Thomas Jefferson University
130 South 9th Street, Suite 1610
Philadelphia, PA 19107
877-JEFFCHP (877-533-3247)
www.jefferson.edu/chp

Frequently Asked Questions (FAQ)

1. What are Allied Health professions?

"Allied Health" includes most of the professional careers that assist and support medical care in the U.S. The following is a listing of many Allied Health professions, along with some of the more common procedures associated with them. More detailed descriptions are listed later in this program.

- Physical Therapy: exercise training, massage, strength training, ...
- Occupational Therapy: teaching daily living tasks, work-related activities, self-care, ...
- Diagnostic Imaging: performing X-rays, CAT scans, MRI, PET scans, ultrasound, ...
- Nursing: promoting health, preventing illness & helping patients cope with illness.
- Bioscience Technologies: performing tests to detect, diagnose, prevent & treat disease.
 - Cytotechnology: perform analyses on cellular specimens.
 - Medical technology: performing lab analyses & interpret results.
 - Biotechnology: development of medical products using biology & engineering.

2. Why would I want to enter an Allied Health profession?

Medical care is one of the fastest growing industries in the U.S. Given the technological advances in health care and the increasing population of aged individuals in the U.S. population, the job market for Allied Health professionals looks very positive for the future. The government predicts over 700,000 Allied Health jobs will be created in the next 10 years. Given the current shortages of some of these professions, salaries and benefits are at an all-time high. Depending on the particular area of specialty, starting salaries are currently in the \$30,000 - \$50,000 range.

3. Can I get an Allied Health degree from Rider University?

No. Allied Health degrees are only offered by universities associated with a medical school.

4. Why would I go to Rider University for two years of pre-Allied Health, rather than just going to Jefferson University?

Allied Health programs like the one at TJU require students to obtain a core of required basic science and math classes from a college or university like Rider, before transferring into their programs. Listings of the course requirements for admission to TJU's programs are included at the back of this handbook.

5. Do I have to go to Thomas Jefferson University for my Allied Health degree?

No. There are other Allied Health programs to which students can apply. Students should consult with the Allied Health advisor at Rider to see if there are any additional requirements for other universities that should be completed while studying at Rider.

6. What is the advantage of going to TJU for Allied Health?

The biggest advantage is the Rider-TJU Affiliate Agreement, in which specific Rider courses have been approved for automatic transfer into TJU's programs. Also, guaranteed admission applies in some situations.

7. How soon do I have to enter the pre-allied health program as a student at Rider?

Students are encouraged to contact the Allied Health advisor at Rider as soon as they think they may want to pursue a career in one of these fields. If advised properly, students can often complete their prerequisite coursework and transfer to an Allied Health program at TJU or another institution after 2 years of classes at Rider, except for most Physical Therapy programs.

8. Does the pre-requisite coursework have to be finished in 2 years at Rider before transferring?

No. Students can take as long as they wish to study at Rider before transferring. Some students choose to finish a bachelor's degree before transferring.

9. Am I guaranteed admission to TJU's Allied Health program if I take courses at Rider?

Rider has an Affiliate Agreement with TJU, wherein course requirements for admission to TJU's Allied Health programs are satisfied by specific courses offered at Rider University. For all programs *except physical therapy*, students are guaranteed admission to TJU, assuming the following stipulations are satisfied:

- A cumulative 2.7 GPA at Rider
- A recommendation for admission by Rider's Allied Health program representative
- All pre-requisite coursework is completed prior to admission

** Some programs (e.g., Physical Therapy) also require volunteer service for admission.*

*** Students must apply to a TJU Allied Health program prior to transfer, preferably during their freshman year at Rider. TJU's enrollment is "rolling", so admission may become limited by seat availability in individual programs.*

**** Recent changes in physical therapy programs mandate different enrollment requirements described in the Physical Therapy section of this manual.*

10. What is the PACE program?

PACE (Planning A College Education) is an advanced admission program for high school seniors committed to an Allied Health profession at TJU. If students are confident they want to pursue a career in Allied Health, they can apply to TJU for PACE during their senior year of high school. If accepted, a seat and admission to TJU's Allied Health programs (*except physical therapy*) is guaranteed provided the student completes his/her prerequisite coursework and maintains the required GPA while at Rider University.

11. How long does it take to get an Allied Health degree?

The time requirements differ slightly for the individual Allied Health programs, but completion usually takes a minimum of 2 years at Rider followed by 1-3 years for the various Allied Health programs.

12. What degree will I eventually end up with if I pursue an Allied Health program?

There are basically two ways to proceed:

- Students may take their prerequisite two years of coursework at Rider, transfer to TJU and receive a degree in the area of their specialty (see specific program details in this handbook);
- Students may complete a 4-year program at Rider, at which time they would receive a bachelor's degree (usually in Biology, Chemistry or Biopsychology), and then transfer to TJU to complete an (additional) Allied Health degree.

<u>Program</u>	<u>Degree & Programs</u>	<u>Tenure at TJU</u>
Diagnostic Imaging	BS in cardiovascular sonography, computed tomography, invasive cardiovascular technology, magnetic resonance imaging, nuclear medicine, radiography and sonography	2 yrs
Bioscience Technologies	BS & MS programs in biotechnology, cytotechnology and medical technology, Post baccalaureate programs in blood banking, clinical chemistry, hematology, microbiology and molecular biology	2-3 yrs 1-3 yrs
Nursing	Prelicensure BSN, RN-BSN, RN-BSN/MN	2 yrs
Occupational Therapy	Combined BS/MS, MS	2-3 yrs
Physical Therapy	DPT (Doctor of Physical Therapy) - <i>now requires a bachelor's</i>	3 yrs
Emergency Medical Services	AS	1-2 yrs

13. Is financial aid available for students who transfer to TJU for Allied Health programs?

Yes. Most TJU students receive some form of financial aid. The office of admissions at TJU can provide specific information about tuition and costs, and financial aid.

Career Options in Allied Health

Physical Therapy

Physical therapists assess physiological, emotional, social, and environmental influences as well as physical factors affecting a patient's health and well being. They then choose and administer the most appropriate course of therapy for each patient in order to restore function, relieve pain, and prevent disability following disease or injury. In today's society, the role of a physical therapist has expanded to encompass health promotion and injury prevention along with the more traditional concerns of physical rehabilitation.

In accord with a recent nation-wide trend of changes in the field of physical therapy, TJU's PT program now requires students to complete an undergraduate degree prior to enrollment. Students receive a Doctorate in Physical Therapy (DPT) degree upon completion of their program.

Occupational Therapy

Occupational therapists help individuals whose lives have been disrupted by injury, illness, or developmental delays to acquire skills for living independent, productive, and satisfying lives. They consider physical, psychological, social and cultural influences in order to understand a patient's specific needs so that treatment planning is most relevant to that individual's life. They also develop an understanding of what might motivate individuals to reach beyond a disability or limitation and work their way toward maximum satisfaction in their daily lives.

Occupational therapists have the ability to find a career that offers variety, independence, and creativity. Many therapists work in hospitals, but employment is also found in rehabilitation centers, community mental health centers, nursing homes, daycare centers, schools, home health agencies and private practice.

Diagnostic Imaging

Diagnostic imagers are multicomponent clinicians who are certified in the fields of x-ray, as well as ultrasound, computed tomography, MRI, or nuclear medicine technology. Diagnostic imagers may also specialize in cardiovascular technology, including echocardiography, peripheral vascular studies, or cardiac catheterization. In addition to operating sophisticated equipment, these health care team members must identify normal and abnormal indications of patient response to various diagnostic studies and be able to provide skilled diagnostic assistance.

Diagnostic imagers may elect to work in a health care setting, education, business, sales, or research in medical imaging.

Nursing

Today's nurses have more professional options than ever before. But new possibilities carry with them new responsibilities. Nurses not only work in hospital settings with bedside patient care, but they are also working in nursing education, healthcare management, private clinics, wellness programs, continuing care facilities, and in home healthcare settings.

At the baccalaureate level, nurses are prepared as generalists who can provide comprehensive nursing care. At the masters level, advanced practice nurses may specialize in adult health, pediatric care, family care, oncology, acute care, or as a family nurse practitioner.

Medical Technology/ Clinical Laboratory Science

Medical Technologists (Clinical Laboratory Scientists) perform the laboratory procedures necessary for disease diagnosis using manual and automated laboratory procedures on blood, urine, and other body fluids. Specialty areas within the field include hematology, coagulation, immunohematology, immunology, microbiology, chemistry, urinalysis, and pathology. Medical technologists are employed by hospitals, physicians offices, clinics, private laboratories, blood banks, industry, research laboratories, and public agencies.

Cytotechnology/ Cell Science

A cytotechnologist, working under the direction of a pathologist, detects cell changes associated with disease. This specialist prepares and stains cell samples for subsequent examination; minute abnormalities in the size, color, or shape of cell structures are indicative of disease states. In many cases, these abnormalities are the first warning signs of cancer. Cytotechnologists are employed by hospitals, clinics, or private laboratories.

Biotechnology/ Molecular Science

Recent advances in the field of molecular biology have created new opportunities for the development of diagnostic and therapeutic products.

Biotechnologists solve problems in health care and the manufacturing of pharmaceutical products by applying biologic and engineering principles. They contribute to the design, research, development, and pre-clinical application testing of diagnostic and therapeutic agents, methods, and systems for health care. Biotechnologists may be employed in laboratories conducting medical research, pharmaceutical testing, government research, forensics, agriculture, or bioprocess engineering.

Qualifications for Transfer

The qualifications for admission into professional programs differ from school to school and from program to program. Students are therefore urged to contact the professional school of their choice for additional information on specific requirements. In general, however, students should strive for a GPA of 3.0 or higher (overall *and* in their science courses). Highly competitive programs, such as physical therapy and occupational therapy, often enroll students with an average GPA of 3.5.

All students in the pre-allied health program are encouraged to seek opportunities for experience in their desired field. In reality, many programs *require* some form of experience prior to acceptance into their program. This may be satisfied by a summer internship, paid position, or participation in a volunteer program.

The Thomas Jefferson University Transfer Curriculum

The following curriculum is designed for students wishing to transfer to Thomas Jefferson University prior to completing the requirements for a Rider University Bachelors of Science degree. If a student wishes to obtain the B.S. degree from Rider University prior to transfer, he/she must also fulfill the requires for that degree program (including College of Liberal Arts and Sciences core requirements) as outlined in the Academic Catalog. **For transfer to an allied health program other than Thomas Jefferson's College of Health Professions, students must contact specific programs for curricular guidelines.**

Specific tracks (physical therapy, occupational therapy, nursing, etc.) within the Allied Health program require different courses. The following table lists the Rider courses which satisfy the TJU College of Health Professions course requirements. The following pages describe the course requirements for each specialty as outlined by Thomas Jefferson University, along with the suggested schedule of Rider courses which fulfill those requirements. The Rider undergraduate course catalog is viewable online in the Academics section of the Rider webpage (www.rider.edu).

TJU-CHP requirements	Credits	RIDER Equivalent courses	Course number
SCIENCES			
Anatomy & Physiology	4-8.....	Human A&P I, with lab Human A&P II, with lab	BIO-221 BIO-222
Biology, General	4-8.....	Principles of Biology I & lab Principles of Biology II & lab	BIO-115 BIO-116
Biological Sciences	4-18.....	No restrictions	
Biochemistry	3.....	Biochemistry & lab	BCH-325 & 326
Chemistry, General	8.....	Principles of Chemistry & lab Intro to Chem Systems & lab	CHE-120 & 121 CHE-122 & 123
Chemistry, Organic	4.....	Organic Chemistry I & lab	CHE 211 & 213
Natural Sciences	4-16.....	No restrictions	
Nutrition	3.....	Not available	
Physics	4-8.....	Principles of Physics & lab General Physics I & lab General Physics II & lab	PHY-100 PHY-200 PHY-201
MATHEMATICS			
Mathematics, College	3.....	Algebra & Trigonometry	MTH-105
Statistics	3.....	Intro to Applied Stats Stats & Experimentation	MTH-120 PSY-205
LANGUAGE ARTS & HUMANITIES			
English, Composition I	3.....	Elements of Comp/Res Writing	CMP 115, 120
English, Composition II	3.....	Literature & Composition	CMP-203
English, Elective	3-6.....	No restrictions	
Humanities	No restrictions	
BEHAVIORAL & SOCIAL SCIENCES			
Selective, cultural	3.....	Anthro: Cross Cultural Persp Racial & Ethnic Relations Social & Cultural Change	SOC-110 SOC-207 SOC-311
Psychology, Introductory	3.....	Intro to Psychology	PSY-100
Psychology, Abnormal	3.....	Abnormal Psychology	PSY-220
Psychology, Developmental	3.....	Develop Psych- Child Develop Psych- Youth/Adolesc	PSY-230 PSY-231
Psychology, Electives	3-6.....	No restrictions	
Social Sciences	No restrictions	
Sociology, Introductory	3.....	The Sociological Imagination	SOC-101
Sociology, Elective	3.....	No restrictions	

Physical Therapy

Note: Students must complete a bachelor's degree which includes completion of the following courses.

Jefferson requirements	credits
Anatomy and Physiology ^a	8
General Biology ^b	8
General Chemistry ^c	8
Physics ^d	8
Algebra/trigonometry or higher ^e	3
Statistics ^f	3
English ^g	6
Abnormal Psychology ^h	3
Developmental or Child Psychology ⁱ	3
Sociology or Anthropology	3
Nutrition or Health & Wellness *	3
Ethics or Philosophy ^j	3
TOTAL	59

Occupational Therapy

(These are for bachelor's level entry. See advisor for post-bachelor's requirements.)

Jefferson requirements	credits
Anatomy and Physiology ^a	8
General Biology ^b (see footnote)	4
Algebra ^c	3
Statistics ^d	3
English ^e	6
General Psychology ^f	3
Abnormal Psychology ^g	3
Developmental Psychology ^h	3
Introductory Sociology ⁱ	3
Cultural Anthropology/Ethnic Soc ^j	3
<u>Electives (arts, humanities, social sciences) ^k</u> ..	<u>12</u>
TOTAL	55

Note: the Jefferson transfer requirements and the Rider courses that fulfill the requirements are indicated by identical superscripts.

*General Biology is not required *per se* by TJU, but is a prerequisite for Anatomy & Physiology at Rider.

Suggested Rider Course Sequence

Year 1 Fall Semester

Principles of Biology I ^b	4
Algebra and Trigonometry ^c	4
College Writing II ^e	3
Introduction to Psychology ^f	3

Year 1 Spring Semester

Principles of Biology II ^b or Behavioral Neuroscience ^b	4
Research Writing ^e	3
The Sociological Imagination ⁱ	3
Developmental Psychology (I or II) ^h	3
Elective ^k	3

Year 2 Fall Semester

Anatomy and Physiology I ^a	4
Stats and Experimentation, or Intro to Applied Stats ^d	3-4
Anthropology: Cultural Perspective ^j	3
Abnormal Psychology ^g	3

Year 2 Spring Semester

Anatomy and Physiology II ^a	4
Elective ^k	3
Elective ^k	3
Elective ^k	3

Diagnostic Imaging

* *New prerequisite requirements were established after Fall 2002 admissions.*

<u>Jefferson requirements:</u>	<u>credits</u>
Anatomy and Physiology ^a	8
Physics ^b	3-4
Algebra or higher ^c	3
English electives ^e	6
<u>Electives (arts, humanities, social sci, etc.) ^h</u>	<u>30</u>
TOTAL	50

Note: the Jefferson transfer requirements and the Rider courses that fulfill the requirements are indicated by identical superscripts

Suggested Rider Course Sequence:

Year 1 Fall Semester

*Principles of Biology I ^h	4
Algebra and Trigonometry ^c	4
College Writing II ^e	3
Introduction to Psychology ^f	3
(recommended, not required)	

Year 1 Spring Semester

*Behavioral Neuroscience ^h	4
Research Writing ^e	3
The Sociological Imagination ^g	3
Elective ^h	3

Year 2 Fall Semester

Anatomy and Physiology I ^a	4
Principles of Physics I (w/lab) ^b	4
Elective.....	3
Elective.....	3

Year 2 Spring Semester

Anatomy and Physiology II ^a	4
Elective.....	3
Elective.....	3
Elective.....	3

Year 3 & 4 Semesters (if applicable)

To be determined by student & Rider pre-Allied Health advisor.

* *Principles of Biology I and Behavioral Neuroscience are not required by Thomas Jefferson University; however they are prerequisites for Anatomy and Physiology I and II. They may be used to satisfy Jefferson's "elective" requirements.*

Nursing: Option I

(transfer to Jefferson prior to completing a BS degree at Rider)

(There are also accelerated programs to bachelor's and/or master's degrees in nursing (BSN/MSN) following completion of a bachelor's degree at Rider, or for RN's. See the advisor for more information.)

Jefferson requirements	credits	
Anatomy and Physiology ^a	8	
Microbiology ^b	4	
Chemistry I ^c	4	
Chemistry II or Biochemistry ^d	4	
General Psychology ^e	3	
Developmental or Child Psychology ^f	3	Note: the Jefferson transfer requirements and the Rider courses that fulfill the requirements are indicated by identical superscripts.
Abnormal Psychology ^g	3	
Sociology ^h	3	
English Composition ⁱ	3	
English (Comp., Lit. or Speech) ^j	3	
Algebra or higher ^k	3	
Introduction to Statistics ^l	3	
Cultural Elective ^m	3	
Nutrition ⁿ	3	
Selective (logic, philosophy, ethics) ^o	3	
<u>Electives ^p</u>	<u>6</u>	
TOTAL	59	

Suggested Rider Course Sequence:

Year 1 Fall Semester

*Principles of Biology I ^p	4
Principles of Chemistry I ^c	3
Principles of Chemistry lab ^c	1
College Writing II ⁱ	3
The Sociological Imagination ^h	3

Year 1 Spring Semester

*Principles of Bio II or Behavioral Neuro ^p	4
Introduction to Chemical Systems ^d	3
Quantitative Methods lab ^d	1
Research Writing ^j	3
Introduction to Psychology ^e	3

Year 2 Fall Semester

Anatomy and Physiology I ^a	4
Cellular and Molecular Biology **	4
Abnormal Psychology ^g	3
Anthropology, or Racial and Ethnic Relations, or American Society ^m	3

Year 2 Spring Semester

Anatomy and Physiology II ^a	4
Developmental Psychology I ^f	3
Algebra and Trigonometry ^k	4
Logic and Language, Ethics, American Philosophy, or Social Philosophy ^o	3

Year 3 Fall Semester

Microbiology ^b	4
Stats and Experimentation, or Intro to Applied Stats ^l	3-4

Nutritionⁿ is not offered by Rider; we recommend completion of this course at a local community college.

** Principles of Biology I and II (or Behavioral Neuro) are not required by Jefferson, however they are prerequisites for Rider's Anatomy and Physiology I and II. They may be used to satisfy Jefferson's "elective" requirement.*

*** Cellular and Molecular Biology is not required by Jefferson, however it is a prerequisite for microbiology at Rider.*

Bioscience Technologies *(Medical Technology, Cytogenetic Technology, and Biotechnology)*

There are multiple program pathways for acquiring bachelor's and/or master's degree in these fields, with slightly different program requirements for each area. See the Rider advisor for Pre-Allied Health for more specific information.

2+2 Bachelor of Science Degree Options (Two academic years):

- For students without a bachelor's degree
- Enrollment into the 2+2 option requires the completion of at least two years (56 credits) of specific prerequisite credits prior to enrollment
- Programs offered in biotechnology/molecular sciences, cytotechnology/cell sciences and medical technology/clinical laboratory sciences

3+1 Bachelor of Science Degree Options (12 consecutive months):

- For students who have completed a minimum of 71 or 72 credits, which includes the same prerequisite courses necessary for the 2+2 option
- It is recommended that the remaining elective course work include biological and chemical science credits
- Programs offered in biotechnology, cytotechnology and medical technology

4+1 Post-Baccalaureate Certificate Options (12 consecutive months):

- For students who have earned a bachelor's degree and meet the prerequisite requirements of the 2+2 option
- Programs offered in biotechnology, cytotechnology and medical technology

Post-Baccalaureate Specialty Tracks (3 semesters accelerated / 5 semesters extended):

- For students who have completed a Bachelors Degree that includes at least 30 semester credits of biology and chemistry
- Laboratory technologists, research technicians and junior scientists are also eligible
- Programs offered in clinical chemistry, immunohematology, microbiology, hematology and molecular biology

Entry-Level Master of Science Degree in Bioscience Technology:

- For students who have completed a minimum of 82 credits of specific prerequisite credits prior to enrollment and wish to graduate with a bachelor and master of science degree in laboratory science

Advanced Master of Science Degree in Bioscience Technology:

- This program is also designed for those students who have already earned a bachelor of science degree in a bioscience technology field and who wish to spend one year receiving a master of science degree
- Both programs are offered in biotechnology, cytotechnology and medical technology

Admissions Requirements

- The **2+2 option** requires that students complete 56 specific prerequisite credits prior to matriculation
- Students interested in the **3+1 option** must meet the same specific prerequisite requirements listed below and the additional electives listed in parentheses, minimum of 71 prerequisite credits
- The **4+1 option** requires a bachelor's degree and the same prerequisites as the 2+2 option
- The **Post-Baccalaureate Degree options in Specialty Tracks** require a bachelor's degree and 30 credits in biology and/or chemistry
- The **Entry-level Master of Science degree option** requires that students complete 82 specific prerequisite credits before matriculation

Students must complete specific prerequisite credits prior to matriculation. Academic courses from accredited institutions with a grade of C or above and CLEP scores are acceptable for transfer. For the graduate programs, the Graduate Record Exam (GRE) or the Miller Analogies Test (MAT) is also required.

Bioscience Technology Requirements

(2+2, 3+1, 4+1 Programs)

Course Distribution	Biotechnology/ Molecular Sciences	Cytotechnology/ Cell Sciences	Medical Technology/ Clinical Laboratory Sciences
Biological or Chemical Sciences	28	28**	28
College Algebra or higher math	3	3	3
English	6	6	6
Electives 2+2*	19	19	19
Electives 3+1*	34	34	34
Electives 4+1*	19	19	19
<i>Total 2+2</i>	<i>56</i>	<i>56</i>	<i>56</i>
<i>Total 3+1</i>	<i>71</i>	<i>71</i>	<i>71</i>
<i>Total 4+1</i>	<i>56</i>	<i>56</i>	<i>56</i>

*A course in Statistics, Physics, Bioinformatics or similar coursework is recommended.

** Science courses must include a minimum of 15 Biology credits and 5 Chemistry credits. Suggested courses include but are not limited to General Biology and Anatomy & Physiology.

Suggested Rider Course Sequence (first two years):

Year 1 Fall Semester

Principles of Biology I ^a	4
Principles of Chemistry I ^b	3
Principles of Chemistry lab ^b	1
Algebra and Trigonometry ^d	4
College Writing I ^f	3

Year 1 Spring Semester

Principles of Biology II ^a	4
Introduction to Chemical Systems ^b	3
Quantitative Methods lab ^b	1
Research Writing ^f	3
Elective ^g	3

Year 2 Fall Semester

Cellular and Molecular Biology, or Anatomy and Physiology I ^a	4
Organic Chemistry I or Biochemistry ^c	3
Organic Chemistry I lab or Biochem lab ^c	1
Stats and Experimentation, or.....	
Intro to Applied Stats ^e	3-4
Elective ^g	3

Year 2 Spring Semester

Genetics, or Anatomy and Physiology II ^a	4
Elective ^g	3
Elective ^g	3
Elective ^g	3
Elective ^g	3

Years 3, 4 (if applicable)

To be determined by student & Rider pre-Allied Health advisor.