



# RUTGERS

School of Arts and Sciences  
DEPARTMENT OF KINESIOLOGY AND HEALTH

## Exercise Science- Pediatrics

### Why Pediatrics?

Pediatrics is primarily concerned with the physical, emotional, and social health of children from birth to young adulthood. Concerned with more than just the physical well-being, those working in pediatrics are involved with the prevention, early detection, and management of behavioral, developmental, and functional social problems that affect their patients. Pediatric healthcare careers are available at all professional levels and in nearly every physical, behavioral, and mental health discipline. Many of these careers allow you to work with children in multiple age ranges.

### What jobs and graduate programs can I expect after graduation?

- DPT School
- Masters in Physical Therapy
- PA School
- Medical School
- Nursing
- Gap year or Masters in Science before going on to DPT School
- Pediatric Sports Medicine
- Pediatric Surgery
- Pediatric Physical Therapy
- Adolescent Medicine
- Sport Psychology
- Pediatric Occupational Therapist
- Inpatient Facility (Hospital)
- Outpatient Facility
- Private Practice
- Sports and Fitness Facilities
- Nursing Homes

### What can I be doing outside from the academic requirements to prepare for a Career in Pediatrics?

- Join a club: Health Occupations Students of America, Health Professions United, Healthy Kids of New Brunswick, Kinesiology and Health Club, Minority Association of Pre-Health Students, Red Cross Club, Rutgers Physical Therapy Club, Rutgers Against Hunger, Women in Health Professions,
- Gain as much experience as possible through volunteering, shadowing at inpatient and outpatient facilities
- Participate in the Honors Research Program
- Build relationships with professors, Physical Therapists, PAs, Nurses in pediatrics, and internship supervisors
- Prepare to take GRE in Junior year
- Consider DPT School options and be ready to apply in Summer before senior year
- Consider a Gap Year, or a Masters in Physical Therapy
- Secure letters of recommendation before application
- Independent Study for a semester with an Exercise Science faculty



# RUTGERS

School of Arts and Sciences  
DEPARTMENT OF KINESIOLOGY AND HEALTH

## Exercise Science-Pediatrics

### What Electives Should I Take if I Want to go into Pediatrics?

The following courses are great to take to enhance your Exercise Science Curriculum:

01:377:160- Introduction to Physical Therapy

01:377:161- Observation in Physical Therapy

01:377:246- Safety Education and Emergency Care

01:377:324- Movement Experiences for Individuals with Disabilities

01377:340- Pediatric Development and Fitness

01:377:362- Independent Study in Exercise Science

*Contact Suggestions for Independent Study:*

Prof. Nicole Nagle   Prof. Lisa Rossman Murphy

01:377:417- Pediatric Health

Faculty Contacts in Field of Pediatrics:

Professor Lisa Rossman Murphy

Professional Associations to Join Related to Physical Therapy once in graduate school:

- Federation of Pediatric Organizations (FOPO)
- American Academy of Pediatrics (AAP)
- Academic Pediatric Association (APA)
- American Pediatric Society (APS)
- Society for Pediatric Research (SPR)
- Council of Pediatric Subspecialties (CoPS)

#### HELPFUL WEBSITES

Graduate Record Examination (GRE)- <https://www.ets.org/gre>

American Physical Therapy Association (APTA)- [www.apta.org](http://www.apta.org)

Explore Health Careers: [explorehealthcareers.org](http://explorehealthcareers.org)

Resources for Pre-PA Students: [pafocus.org](http://pafocus.org)

Resources for Pre-PT Students: [www.apta.org/ProspectiveStudents](http://www.apta.org/ProspectiveStudents)

MCAT Information: <https://students-residents.aamc.org/>

Careers in Pediatrics: <https://www.aamc.org/cim/explore-options/specialty-profiles/pediatrics>

# Curriculum Requirements-Exercise Science (Declared Fall 2020 and later)

## Kinesiology and Health Exercise Science Major

REQUIREMENT	NUMBER	COURSE NAME	CREDITS
Kinesiology and Health	01:377:140	Foundations of Kinesiology and Health	1.5
	01:377:205	Principles of a Healthy Lifestyle	1.5
Biology	01:119:115	General Biology I	4
	01:119:116	General Biology II	4
	01:119:117	Biological Research Laboratory	2
Statistics	01:377:275	Basic Statistics for Exercise Science	3
Calculus	01:640:135	Calculus I	4
Chemistry	01:160:161	General Chemistry	4
	01:160:162	General Chemistry	4
	01:160:171	Introduction to Experimentation	1
Physics	01:750:193	Physics for the Sciences	4
	01:750:194	Physics for the Sciences	4
Psychology	01:830:101	General Psychology	3
	01:377:301 or 455	Psychology of Sport and Exercise or Exercise Psychology	3
Physiology	01:146:356	Systems Physiology	3
	01:377:370	Exercise Physiology	3
	01:377:371	Exercise Physiology Lab	1
Anatomy	01:377:223	Functional Human Anatomy Lecture	3
	01:377:224	Functional Human Anatomy Lab	1
Biomechanics	01:377:350	Biomechanics	3
	01:377:310	Motor Learning	3
Electives	At least 3 credits must be at the 300 or 400 level and can include mini-courses. A maximum of one approved course can be outside the major.		6
Testing and Prescription	01:377:410	Exercise Testing and Prescription	4
Professional Development	01:377:407	Administration of Exercise Science	1.5
Internship	01:377:493	Internship in Exercise Science	3
<b>Total Credits = 74.5</b>			

Department of Kinesiology and Health

Loree Gymnasium

70 Lipman Drive

New Brunswick, NJ 08901

Phone: 848-932-9525

**RUTGERS**

School of Arts and Sciences

Visit us at: [kines.rutgers.edu](http://kines.rutgers.edu)

# Sample Course Plan of Study

## Exercise Science Major

(Declared Fall 2020 and later)

### Department of Kinesiology and Health

### Exercise Science Major

### Sample Plan of Study

#### First Year

Fall		
119:115	General Biology I	4
377:140	Foundations of Kinesiology and Health	1.5
377:205	Principles of a Healthy Lifestyle	1.5

Spring		
119:116	General Biology II	4
119:117	Biological Research Lab	2
830:101	General Psychology	3
640:135	Calculus	4

#### Second Year

Fall		
160:161	General Chemistry	4
160:171	Introduction to Experimentation	1
377:275	Basic Stats for Exercise Science	3

Spring		
160:162	General Chemistry	4
377:223 377:224	Functional Human Anatomy	4
377:301 or 377:455	Sport Psych or Exercise Psych	3

#### Third Year

Fall		
750:193	Physics for the Sciences	4
377:310	Motor Learning	3
377:___	Elective	3

Spring		
750:194	Physics for the Sciences	4
146:356	Systems Physiology	3
377:___	Elective (300 level or above)	3

#### Fourth Year

Fall		
377:407	Administration of Exercise Science	1.5
377:370 377:371	Exercise Physiology Exercise Phys. Lab	4
377:350	Biomechanics	3

Spring		
377:493	Internship in Exercise Science	3 or 6
377:410	Exercise Testing and Prescription	4

The above sample plan is for the Major only. Students must also satisfy their school requirements.