



# PRE-PHYSICIAN ASSISTANT

## COLLEGE OF ARTS & SCIENCES

COLUMBIA HALL, ROOM 1000

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### Health Sciences Advisors:

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It is our goal at UND to prepare students for any PA in the country. Seats in PA school entering classes are limited – all together less than 7,000 seats are available nationwide each year. The national ratio of qualified applicants per available seat is approximately 3:1. Getting accepted into any PA school is done through a highly competitive, two stage application process. It is extremely important that you are well prepared and able to present the best possible application to PA schools when you apply - good planning is key!

The Pre-PA Program is not a major or degree granting program at UND. In order to graduate with a degree from UND, you will need to:

1. Choose a **Major** and complete the specific requirements determined by the department responsible for that major
2. Complete the **Essential Studies Requirements**
3. Complete 125 semester credits (36 of which must be upper divisional credits)

You will be assigned two advisors while pursuing your degree and the Pre-PA Program at UND:

- A major advisor (from your major department) to help with the planning of your major curriculum
- The Health Sciences Advisor (from the College of Arts & Sciences) to help with all aspects of PA school preparation

**Joining** the Pre-PA Program is easy!:

1. Incoming freshmen students should plan to attend Summer Orientation - you can declare Pre-PA at that time
2. Current or transfer students can declare Pre-PA by stopping by the A&S main office or by calling us at 701-777-2749

**Staying** in the Pre-PA Program is hard!:

1. *Incoming Freshmen* must:
  - Attend all freshmen group advising meetings during the fall semester
  - Attend one freshmen group advising meeting during the spring semester
  - Complete the following courses, with a C grade or better, before the start of sophomore year:
    - Bio 150-151, with labs
    - Math 103 (may test out of this with an ACT Math score of 26, or appropriate Math placement test score)
    - Chem 121-122, with labs
  - Maintain a cumulative GPA of 3.0 or higher during freshman year
2. *Transfer students, or current students switching to Pre-PA after freshman year, must:*
  - If not already completed at UND or transferred in, complete the following courses with a C grade or better:
    - Bio 150-151, with labs
    - Math 103
    - Chem 121-122, with labs
  - Have a cumulative GPA of 3.0 or higher
3. *All continuing Pre-PA students must:*
  - Take Pre-PA courses as advised
  - Prepare for and take the GRE
  - Keep cumulative GPA and science GPA competitive

PA schools consider a variety of factors when reviewing applications:

## 1. Academics

### a. Undergraduate Preparation

Admission into PA school typically requires completion of a Bachelor's degree or at least 90 credits from an accredited college or university. All PA schools have specific content or course prerequisites which are included in the UND Pre-PA Program. UND accepts AP and post-secondary transfer credits toward the completion of a bachelor's degree in accordance with the NDUS policies of [General Education Requirement Transfer Agreement](#) (GERTA) and [Common Course Numbering](#) (CCN). UND also has numerous articulation agreements and course equivalencies with other academic institutions. You should, however, check with the PA schools on your wish list regarding the post-UND implications of any AP, IB, CIS, CLEP, on-line, distance learning or community college work you plan to complete prior to your undergraduate matriculation.

### b. Major

PA schools do not require any particular major. Pre-PA students have completed such majors as Anthropology, Athletic Training, Biology, Classical Studies, Communication, Dietetics, Foreign Language, History, Honors, Interdisciplinary Studies, Kinesiology, Medical Lab Science, Nutrition, Philosophy, Political Science, and Psychology.

The choice for a major is entirely up to you! You should pick something you are good at, or enjoy studying, or fits your "plan B" if you don't end up going to PA school. A list of each major and degree offered at UND may be found at: <http://und.edu/academics/registrar/fields-of-study.cfm>. Click on a particular major to see what you will be studying, as well as opportunities and careers associated with that major. For specific requirements and course descriptions, click on the [Academics – Check out the courses you'll take](#) link on the right side of each major page. Four year plans (i.e., schedule of courses) for each degree are listed by college and are posted online at: <http://und-public.courseleaf.com/4yearplan/>.

The combination of the Pre-PA Program with a major in the College of Arts and Sciences can usually be finished in 4 years if both major and Pre-PA are started freshmen year. The combination of the Pre-PA program with a major in Athletic Training, Aviation, Dietetics, Engineering, Education, Nursing, Nutrition or Medical Laboratory Science will take longer. Because these majors include busy curricula and/or practicums, in most cases if you plan to combine one of them with Pre-PA, you may need at least 5 years of undergraduate studies to do so.

### c. GPA

Since PA school curriculum is considerably more challenging than any undergraduate curricula, you need to leave no doubt of your academic ability by excelling at the undergraduate level. Average cumulative GPA of recent PA school matriculants: 3.5-3.7.

## 2. GRE

### a. Timing

This rigorous exam is required by over 71% of PA schools – students planning to finish their undergraduate degrees in 4 years typically take the GRE in May or June after their 3<sup>rd</sup> year (junior year) of college. While retakes are allowed, it is best to "do it right the first time".

### b. Preparation

Since considerable time (20+ hours/week) needs to go into GRE preparation, UND students are encouraged to take a lighter load (12 credits) during the spring semester of their junior year to give them room for reviewing and practice testing on their own.

### c. Scores

Average GRE scores for recent PA school matriculants:

GRE Analytical = 4.14 (60.7<sup>th</sup> percentile)

GRE Quantitative = 155 (61.5<sup>th</sup> percentile)

GRE Verbal = 156 (68.2<sup>nd</sup> percentile)

### 3. Life Experiences

- a. Real World - Direct Patient Care Experience => 1,000-2,000+ hours
  - PA schools expect you to spend considerable time working in health care. You need to get a job in which you give direct medical care to patients, have a chance to observe PA's, doctors and other health care team members, and have a supervisor observing you (most PA schools require a letter of recommendation from a health care work supervisor).
  - You may need to combine several jobs to get the experience and understanding of medicine you need. Work settings can include hospital, rehab, clinic, group care home (nursing, disabled children or adults, Alzheimer's unit, VA, etc.), hospice, home health, support services, phlebotomy, EMS, etc.
- b. Shadowing => 20-40 hours
  - The majority of hours need to be with basic care PA's: family medicine, internal medicine, pediatrics
  - A few of the hours can be with specialists
  - Be sure to include both rural and city experiences
- c. Community Service => These activities will set you apart!
  - Do things that you love, have a passion for, demonstrate your desire to serve others and give back, show your love of learning, let your leadership skills shine, etc.
  - These volunteer activities/paid jobs include, but are not limited to:
    - Lifeguards, first responders
    - Coaching/teaching sports (for park boards, travelling leagues, Special Olympics, etc.)
    - Camp counseling (church camps, day camps, medical camps, music camps, etc.)
    - Big Brother/Big Sister, Meals on Wheels, Relay for Life, etc.
    - Volunteering at your local city mission, free clinic, humane society, etc.
    - College organization participation or leadership (clubs, honor societies, sororities/fraternities, etc.)
    - College tutoring or TA positions
    - Medical missions trips (through college organizations, national organizations, or local churches)
    - Church work/sponsored activities (Sunday school teacher, youth worker, mission trips, etc.)
    - American Red Cross, Peace Corps
- d. Research => only expected of students planning to attend top tier PA schools
  - UND has numerous opportunities for doing undergraduate basic science research during summer breaks or the school year – you may apply for positions that either pay or give you college credit
  - Regional hospitals, labs, companies may offer summer opportunities
  - National labs (the NIH and the CDC) have some summer positions for college students
- e. Keep a log of all hours

Although formal documentation is not needed, you should keep a simple personal log for all experiences/work in a notebook – be sure to include dates, times, activities, impressions, and note any meaningful patients or experiences. You will also need to provide contact information for someone who witnessed you in each experience or circumstance, so make note of that as well!

### 4. Letters of Recommendation

- a. You will need 3-4 letters of recommendation or evaluation for most PA schools.
- b. Letters need to address the personal attributes and academic abilities that make you a good fit for PA school and the profession of medicine.
- c. Authors will have to include professors and health care work supervisors who know you very well.

### 5. Legal Record

- a. Keep legal records clean. All minors and felonies will need to be disclosed on applications.
- b. Keep university records clean. Any institutional actions for code of student conduct violations (behavioral, academic, legal, etc.) will need to be disclosed on applications.
- c. Keep personal social media sites clean (Facebook, Twitter, etc.). Be sure to demonstrate integrity, maturity, wholesomeness and good taste in all postings (verbal, photos, pictures, etc.).

### 6. Home State Residency

In general, PA schools consider your home state of residency to be where you graduated high school and/or where your parent(s) currently live. You do not become a resident of a state by just attending college there!

Courses included in the **UND Pre-Physician Assistant Program** fall into one, or more, categories. These categories are:

1. Requirements for most regional PA schools
2. Good, additional preparation for PA schools

The checklist below will help you keep track of your progress in the Pre-PA program:

**UND Courses required by most PA schools:**

- |                                                              |                                                              |
|--------------------------------------------------------------|--------------------------------------------------------------|
| <input type="checkbox"/> Biol 150, 150L General Biology I    | <input type="checkbox"/> Math (choose one)                   |
| <input type="checkbox"/> Biol 151, 151L General Biology II   | Math 103 College Algebra                                     |
|                                                              | Math 146 Applied Calculus                                    |
|                                                              | AP credit for Calculus                                       |
| <input type="checkbox"/> Chem 121, 121L General Chemistry I  | <input type="checkbox"/> Statistics (choose one)             |
| <input type="checkbox"/> Chem 122, 122L General Chemistry II | Psyc 241 Psychological Statistics                            |
|                                                              | Soc 326 Sociological Statistics                              |
| <input type="checkbox"/> Organic Chemistry (choose one)      |                                                              |
| Chem 341+L & 342+L Organic Chemistry I and II                |                                                              |
| Chem 340, 340L Survey of Organic Chem                        |                                                              |
| <input type="checkbox"/> BMB 301 Biochemistry                | <input type="checkbox"/> Engl 110 Composition I              |
|                                                              | <input type="checkbox"/> Engl 130 Composition II             |
| <input type="checkbox"/> Phys 211, 211L College Physics I ?  | <input type="checkbox"/> Psyc 111 Introduction to Psychology |
|                                                              | <input type="checkbox"/> Psyc 250 Developmental Psychology   |
| <input type="checkbox"/> Anat 204, 204L Human Anatomy        | <input type="checkbox"/> Psyc 270 Abnormal Psychology        |
|                                                              |                                                              |
| <input type="checkbox"/> A Physiology course (choose one)    | <input type="checkbox"/> Med 205 Medical Terminology         |
| Biol 442, 442L Physiology of Organs/Systs (for Bio majors)   |                                                              |
| PPT 301 Human Physiology (for other majors)                  |                                                              |
| <input type="checkbox"/> Mbio 302, 302L General Microbiology |                                                              |
| <input type="checkbox"/> PPT 315 Pharmacology                |                                                              |

**UND electives good for PA school preparation (take as many as desired – all are optional):**

- |                                                        |                                                               |
|--------------------------------------------------------|---------------------------------------------------------------|
| <input type="checkbox"/> Biol 315 Genetics             | <input type="checkbox"/> Nutr 240 Fundamentals of Nutrition   |
| <input type="checkbox"/> Biol 315R Genetics Recitation |                                                               |
| <input type="checkbox"/> Biol 341 Cell Biology         | <input type="checkbox"/> Comm 212 Interpersonal Communication |
| <input type="checkbox"/> Biol 364, 364L Parasitology   |                                                               |
| <input type="checkbox"/> Bio 369, 369L Histology       |                                                               |
| <input type="checkbox"/> MBio 328 Immunology           |                                                               |

Your course schedule at UND will vary depending on your major. Ultimately, all students, regardless of major, will be able to take the courses covering the content they need for PA school. The chart below shows complete major and Pre-PA **science and math** course schedules for both **Biology** and **Chem/Biochem** majors. For students pursuing **other majors**, only the **science and math** Pre-PA courses are listed so they will need to "pencil in" their major requirements as well. Also, all UND students will need to add any additional major requirements, Essential Studies requirements, and other electives to each semester in the schedules below as needed or desired:

	Freshman	Sophomore	Junior	Senior
Fall	Bio majors: <ul style="list-style-type: none"> <li>Bio 120</li> <li>Bio 150, 150L</li> <li>Chem 121, 121L</li> <li>Math 103</li> </ul>	Bio majors: <ul style="list-style-type: none"> <li>Chem 341, 341L?***</li> <li>Bio 315 (Genetics)</li> <li>Bio 315R (Genetics Recitation)</li> <li>Bio 332 (Ecology)</li> </ul>	Bio majors: <ul style="list-style-type: none"> <li>Physics 211, 211L</li> <li>Bio 442, 442L</li> <li>Chem 333, 333L (for minor) ?</li> </ul>	Bio majors: <ul style="list-style-type: none"> <li>Bio 480</li> <li>Bio requirement**</li> <li>Anat 204, 204L or Other Bio requirement**</li> </ul>
	Chem/Biochem majors: <ul style="list-style-type: none"> <li>Chem 101</li> <li>Chem 121, 121L</li> <li>Bio 150, 150L</li> <li>Math 103</li> </ul>	Chem/Biochem majors: <ul style="list-style-type: none"> <li>Chem 341, 341L</li> <li>Chem 361</li> <li>Chem 333, 333L or Bio 315</li> <li>Physics 211, 211L</li> </ul>	Chem/Biochem majors: <ul style="list-style-type: none"> <li>Chem 466</li> <li>Anat 204+L or Bio 442+L</li> <li>Chem 333, 333L or Bio 315</li> </ul>	Chem/Biochem majors: <ul style="list-style-type: none"> <li>BMB 401, 403</li> <li>Chem 492 or 495?</li> <li>Bio elective?*</li> </ul>
	Other majors: <ul style="list-style-type: none"> <li>Bio 150, 150L</li> <li>Chem 121, 121L</li> <li>Math 103</li> </ul>	Other majors: <ul style="list-style-type: none"> <li>Chem 341, 341L?***</li> <li>Anat 204, 204L</li> <li>Bio 315, 315R?</li> <li>Your major requirements?</li> </ul>	Other majors: <ul style="list-style-type: none"> <li>Physics 211, 211L ?</li> <li>PPT 301</li> <li>Chem 333, 333L (for minor) ?</li> <li>Your major requirements?</li> </ul>	Other majors: <ul style="list-style-type: none"> <li>Bio 315, 315R?</li> <li>Bio elective**</li> <li>Your major requirements?</li> </ul>
	Everyone: Courses from Group 1*	Everyone: Courses from Group 1 or 2*	Everyone: Courses from Group 2 or 3*	Everyone: Courses from Group 2, 3 or 4*  <b>2<sup>o</sup> PA School Apps Due</b> <i>(Submit to schools ASAP)</i>  <b>Interviews Begin</b> <i>(Usually run October-February)</i>
Spr	Bio majors: <ul style="list-style-type: none"> <li>Bio 151, 151L</li> <li>Chem 122, 122L</li> <li>Math 146</li> </ul>	Bio majors : <ul style="list-style-type: none"> <li>Chem 342+L or 340+L***</li> <li>Bio 341, 341L (Cell Bio)</li> <li>Bio 312 (Evolution)</li> </ul>	Bio majors: <ul style="list-style-type: none"> <li>Physics 212, 212L</li> <li>BMB 301 or MBio 302+L</li> </ul>	Bio majors: <ul style="list-style-type: none"> <li>Bio requirement**</li> <li>BMB 301 or MBio 302+L</li> </ul>
	Chem/Biochem majors: <ul style="list-style-type: none"> <li>Bio 151, 151L</li> <li>Chem 122, 122L</li> <li>Math 146</li> </ul>	Chem/Biochem majors: <ul style="list-style-type: none"> <li>Chem 342, 342L</li> <li>Chem 362</li> <li>Physics 212, 212L</li> </ul>	Chem/Biochem majors: <ul style="list-style-type: none"> <li>BMB 301</li> <li>Chem 467</li> <li>Anat 204+L or PPT 301</li> </ul>	Chem/Biochem majors: <ul style="list-style-type: none"> <li>Chem 492 or 495?</li> <li>MBio 302, 302L</li> <li>Bio elective?*</li> </ul>
	Other majors: <ul style="list-style-type: none"> <li>Bio 151, 151L</li> <li>Chem 122, 122L</li> <li>Math 146</li> </ul>	Other majors: <ul style="list-style-type: none"> <li>Chem 342+L or 340+L?***</li> <li>Bio 341</li> <li>Your major requirements?</li> </ul>	Other majors: <ul style="list-style-type: none"> <li>BMB 301 or MBio 302+L</li> <li>Bio elective?*</li> <li>Your major requirements?</li> </ul>	Other majors: <ul style="list-style-type: none"> <li>BMB 301 or MBio 302+L</li> <li>Bio elective?*</li> <li>Your major requirements?</li> </ul>
	Everyone: Courses from Group 1*	Everyone: Courses from Group 1 or 2*	Everyone: Courses from Group 1, 2 or 3*  <i>Take a lighter credit load (12 credits) for GRE prep</i>	Everyone: Courses from Group 2, 3 or 4*
Sum	Bio 341 is offered at UND during the summer – to help lighten their load during the regular school year, students may wish to do it after freshman or sophomore year (once Bio 150-151 and Chem 121-122 are completed) .....		<b>GRE (1<sup>st</sup> one by May 15<sup>th</sup>)</b> <b>1<sup>o</sup> PA School Apps Due</b> <i>(Submit to CASPA by May 30<sup>th</sup>)</i>	

\* Courses in Group 1 are **required** for all majors. Courses from Groups 2, 3 and 4 are **options for Bio requirements/electives** or other **electives**.

Group 1: Eng 110 or 130, Psych 111, Psych 250, Psych 270, Soc 110, Comm 110, a Stats class (Psych 241 or Soc 326); additionally, the Chem/Biochem major also requires a level 2 proficiency in a Foreign Language (i.e., Span 101 and 102)

\*\*Group 2 Fall courses: Bio 315+R, Comm 212, Nutr 240

\*\*Group 2 Spring courses: Bio 341, Comm 212, Nutr 240

\*\*Group 3 Fall courses: Bio 364+L, Bio 378, Chem 333;

\*\*Group 3 Spring courses: MBio 302+L

\*\*Group 4 Fall courses: Bio 390, Bio 420, MBio 328;

\*\*Group 4 Spring courses: Bio 369+L, Bio 415, PPT 315

\*\*\***OChem** and **BioChem** requirements vary greatly from PA school to PA school - see Health Sciences Advisor for details!