

How to Fit in Prerequisites for Medical School

It is not trivial to plan on how to schedule your professional school prerequisites into your time at Rhodes. This is even more difficult if you want to go to Medical School right out of Rhodes. Most medical schools require completion of prerequisites before acceptance. The new (2015) MCAT is required before application which means usually a year before the proposed start of medical school. So if you want to go to Medical school right after graduation you really only have three years to complete prerequisites and experience with medicine.

Rhodes courses to take: (2015 MCAT for class of 2016 and beyond)

- 2 semesters of Biology with labs; Biology 130 + 131L and 140 + 141L or upper levels most like the med. School classes (including Biochem)
- 5 semesters of Chemistry with labs (1st yr seq.): Foundations of Chemistry 120 + 120lab [fall], Organic I, Chemistry 211 [spring]. (2nd yr seq.) Organic II Chem. 212 + Organic lab [212L 2 hrs] 212L.[fall], Analytical Chemistry and Lab, Chem 240 + 240 Lab. Biochemistry (Chem 312) which can be taken at the same time or after Analytical.
- 2 semesters Physics; Physics 111 + 111L and 112 + 112L (Rhodes 111 and 112 require Calc 121 or permission of instructor).
- Foundational Issues in Psychology (Psyc 150)
- Introductory Sociology (Anthro/Soc 105, not open to seniors)
- An additional upper level Biology course beyond core is important to be competitive (along with the now required Biochem).

[if taking a MCAT in 2012, 2013, or 2014 it will not require you having had Sociology, Psychology or Biochemistry although all are recommended for most medical schools]

In addition, a few require one or two college math courses only a few specify this as Calculus. Most medical schools will emphasize statistics. Most medical schools require two English classes but all but U. Texas Galveston will allow our writing intensive courses to count. These may be taken after application. Unlike science prerequisites, AP credit can often be used for the English and Math credits if Rhodes grants credit.

Most medical schools explicitly suggest (Texas requires) taking at least one more upper level biology classes that most approach Medical school type work, beyond the introductory biology sequence for class of 2016 and beyond (for 2016 medical school matriculation). For 2014-2015 cycle applicants this would be two more courses but can include Biochemistry (required by some schools in this period). (Remember medical schools do not require a specific major). We recommend public speaking or acting, at some time as you go on. Lots of other courses such as Medical Ethics, Medical Sociology, Pain Suffering and Death, and Medical Psychology, Drawing, Painting, Sculpture, History, and courses of different cultures await your enrollment over your years at Rhodes and will give you tools and knowledge to use.

In addition Medical schools require clinical/hospital/or medical experience. This can take the form of one of our internships, volunteer work or employment.

Lastly a sustained record of community service is required. This may overlap with medical experience.

So the issue remains how to fit it into four years, and really MCAT assumed work in three years if you want to go without a gap [comments written for class of 2016 and 2016 and beyond medical school matriculation]

Start with either **Foundations of Chemistry** or **Biology I** this semester. Next term take the 2nd in that sequence. Pick the one that you are more likely to be major in or where you have the most interest. Do start with Physics if that might be your major. Do consider doubling up to start if you are already a very strong science student and will to give up more of your time than other starting students to study this first year. Even if you do not double up to start, you will be doubling up throughout in the next two years.

Down the road if you plan on taking our Physics you will need our Calculus I (Math 211). Many of our students take a non-calc physics at other schools over the summer to both give more options for course work during the year, relieve excessive science overlap, and to remove the need for a calculus course. Some medical schools like to see a calculus course but only a few require one.

Similarly more and more of our students and nationwide are using all four years of their undergraduate schooling to prepare for the MCAT and then applying after their senior year, instead of their Junior year. This is done with a gap or glide year after graduation and the start of medical school. It is now the norm for students going to medical school.

So, counting the years to prepare for the MCAT and not having all classes that you should take listed, see the following.

No Gap year Options with one sequence the first year terms, 3 years + summer work

Remember not all prereq's are on these tables! You also need one more , 1 Sociology, +1 psychology.

Just Sciences shown below.

Fall Term	Spring Term	Summer School Not Rhodes*
Biology I, 130 + 131Lab	Biology II 140 + 141Lab	
Found.Chem, 120+L	Organic I, 211	Physics I + L Physics II +L
Organic II, 212+L Upper level Biology	Analytical, 240+L & Biochemistr 413	

*Summer work at an accredited four year college or university
Remember not all prereq's are on this table

Fall Term	Spring Term	Summer School Not Rhodes*
Found.Chem, 120+L	Organic I, 211	
Biology I, 130 + 131Lab Organic II, 212+L	Biology II 140 + 141Lab Analytical, 240+L	Physics I + L Physics II + L
Upper level Biology	Biochemistry 413	

*Summer work at an accredited four year college or university
Remember not all prereq's are on this table

Fall Term	Spring Term	Summer School Not Rhodes*
Physics I + L	Physics II +L	
Biology I, 130 + 131Lab Found.Chem, 120+L	Biology II 140 + 141Lab Organic I, 211	
Organic II, 212+L UL Biology	Analytical, 240+L & Biochemistr 413	
Fall Term	Spring Term	Summer School Not Rhodes*
Biology I, 130 + 131Lab	Biology II 140 + 141Lab	
Found.Chem, 120+L	Organic I, 211	

Physics I + L	Physics II +L	
Organic II, 212+L	Analytical, 240+L & Biochemistry 413	

Fall Term	Spring Term	Summer School Not Rhodes*
Found.Chem, 120+L	Organic I, 211	
Biology I, 130 + 131Lab Organic II, 212+L	Biology II 140 + 141Lab Analytical, 240+L	
Upper level Biology Physics I + L	Biochemistry 413 Physics II + L	

Fall Term	Spring Term	Summer School Not Rhodes*
Found.Chem, 120+L	Organic I, 211	
Biology I, 130 + 131Lab Organic II, 212+L	Biology II 140 + 141Lab Analytical, 240+L &	Biochemistry 413
Physics I + L Upper level Biology	Physics II + L .	

*Summer work at an accredited four year college or university
Remember not all prereq's are on this table

Fall Term	Spring Term	Summer School Not Rhodes*
Biology I, 130 + 131Lab	Biology II 140 + 141Lab	
Organic II, 212+L Found.Chem, 120+L	Organic I, 211 Analytical, 240+L &	Biochemistry 413
Physics I + L Upper level Biology	Physics II + L .	

Gap year options with one sequence the first two years

Remember the average age of matriculated medical school students is 24.
Take a 1 year sequence each year. Start with any first sequence.

This option has the advantage of taking all four years for your undergraduate science courses. Assuming you take at least some required, recommended, or elective science while taking another, Medical schools will see that you can take two sciences at the same time and do well. This is something that they will look for.

Gap years are common and many schools see this as advantageous to allow applicants to show more maturity and experience, thus being more competitive. Nationwide 50% or more of Medical School students are older than college graduates. The average age of entering Medical School students in 2011 was 24-25.

Some of our best Medical School alumni, did Teach for America, Peace Corps, or some other activity before applying to Medical School. Other gap year experiences are internships, research lab jobs, service work, or hospital jobs. Any job to pay down debt and save for medical school will be respected as well.

This option has one disadvantage regarding loan repayment. Our understanding is that you would need to start loan repayment 6 months after graduation from Rhodes, if you are not enrolled in a graduate program at that time.

Remember not all prereq's are on these tables! You also need one more , 1 Sociology, +1 psychology. Just Sciences shown below.

Fall Term	Spring Term	Summer School non-Rhodes
Found. Chem, 120+L	Organic I, 211	
Organic II 212 +212 L (2hr)	Quantitative Chem 240 +L	
Biology I, 130 + 131L Biochemistry 413 (or 2 nd term)	Biology II 140 + 141L	
Physics I, 111 + 111L Upper Level Biol (or 2 nd term)	Physics II, 112 +112L	

Fall Term	Spring Term	Summer School non-Rhodes
Biology I, 130 + 131L	Biology II 140 + 141L	
Found. Chem, 120+L	Organic I, 211	

Organic II 212 +212 L (2hr)	Quantitative Chem 240 +L Upper level Bio (or 1 st term)	
Physics I, 111 + 111L Biochemistry 413 (or 2 nd term)	Physics II, 112 +112L	

Fall Term	Spring Term	Summer School non-Rhodes
Physics I, 111 + 111L	Physics II, 112 +112L	
Found. Chem, 120+L	Organic I, 211	
Organic II 212 +212 L (2hr) Biology I, 130 + 131L	Quantitative Chem 240 +L Biology II 140 + 141L	
Biochemistry 413 (or 2 nd term)	Upper level Bio (or 1st term)	

No Gap year Options with two sequences the first year terms

Taking two sciences the first year has some advantages and some disadvantages. It is not recommended unless you have a strong science background and are ready to excel in college level work.

1. Did you take more than 1 AP science class in HS?
2. Did you receive A's in HS AP science classes?
3. Do you manage your time wisely and schedule priority time daily for study?
4. Do you consider yourself a strong science student ready to forgo some of the activities in which other First Year students will participate?

(Some health professions advisors would say if the answer to two or more is no, you should start with one science sequence)

Check with your advisor and Dir HPA before you attempt starting with two science sequences together

Disadvantages of doubling up are that many students who start out interested in Medicine change to other career goals after coming to college. This can be for very good reasons, such as finding a field that you never were exposed to in HS such as Psychology, or Economics and Business. If you start doubled up in sciences there are fewer slots to explore other majors and areas. If you do not major in a science or need extra science for a later professional school, you will have used three electives in your first two semesters. Another disadvantage of doubling up is that most High School graduates need to make a transition to the independent work demands of college work. How fast a student makes that adjustment varies with all students. If a rigorous science course will be a challenge during that adjustment, two such courses will be more than twice as challenging.

Doubled up options from the start

Fall Term	Spring Term	Summer School Not Rhodes
Biology I, 130 + 131L Found.Chem, 120+L	Biology II 140 + 141L Organic I, 211	
Organic II, 212+L	Analytical Chem, 240+L	
Physics I, 111 + 111L & Biochemistry 413	Physics II, 112 +112L Upper level Biology	

Remember not all prereq's are on this table

OR

Fall Term	Spring Term	Summer School Not Rhodes
Physics I, 111 + 111L Biology II, 130 + 130L	Physics II, 112 +112L Biology II 140 + 141L	
Found. Chem, 120+L	Organic I, 211	
Organic II 212 + L Upper level Bio	Quantitative Chem 240 +L Biochemistry 413	

Remember not all prereq's are on this table.

Check with your advisor and Dir HPA before you attempt starting with two science sequences together

Abroad Programs:

Other than May and summer programs, most abroad programs knock out a year sequence even if you will be abroad only for the first term. Our science sequences all start in the fall term, and the spring courses requires the first of the sequence. Students who go abroad with many programs; take one or more sequences during summer school , double up more, and /or take all four years to complete prerequisite courses. If you go to a second term only program, you could more easily double up on the one missed course later (if you went away your Sophomore year) or take the single course during the Junior or Sophomore summer.

The Scotland St. Andrews program will allow taking Organic I in Scotland, transferring the course back to Rhodes, and then returning to our Organic II the following year. Some English speaking year programs may allow taking a full sequences away from Rhodes. We do not recommend taking science courses in a non-native language and medical schools may not allow all foreign work for prerequisites.

Starting the full year Science sequence your second year

Although it will be easier to start with a science sequence your first year for the reasons above, we have a number of successful students each year who start their science sequence after the first year. They will; double up more, take summer school and use their senior year (or even post senior years after graduation from Rhodes) for these courses.