

Year 3 Honors Specialization Medical Sciences Counseling Tips

The purpose of this message is to familiarize you with the Honors Specialization in Medical Sciences. This interdisciplinary module offers students the flexibility to choose from a wide selection of basic medical science courses but it also has certain modular and discipline requirements of which you should be aware. It is important to receive these instructions now -- Year 3 is an important year as the courses you take this year will directly impact your course selection in Year 4. Planning the next two years in advance will avoid "scrambling" in Year 4 to complete the module.

1. Entry into Year 4 requires the completion of 3.5 foundation courses so register for any of these courses that were not completed in Year 2.
2. You will require **2.0 essay courses** to graduate. You will complete 1.0 essay courses in Year 4 of this module (Medical Sciences 4900F/G and 4930F/G). Most of you have already completed Biology 2290F/G this past year, which still leaves 0.5 essay course. You may wish to take a 0.5 essay course this year so that you only have the Medical Sciences essay courses left to complete in Year 4.
3. Remember that you must complete your breadth requirement for graduation: **1.0 course from each of Categories A, B and C**. More information can be found at: <http://www.westerncalendar.uwo.ca/2011/pg81.html>

You completed two of these categories in Year 1 (C and either A or B). Although it is not necessary to do so this year, you may want to consider meeting your final category requirement this year. Finding a Category A or B course that is also an essay would meet two graduation requirements with one course.

4. The "discipline" requirement in this module can be summarized as follows:
Over Years 2-4 you must complete:
 - **2.0 courses from one Basic Medical Science discipline,**
 - **2.0 courses from another Basic Medical Science discipline or combination of disciplines, and**
 - **1.0 courses from any Basic Medical Science discipline(s).**

The basic medical science disciplines include Anatomy & Cell Biology, Biochemistry, Medical Biophysics, Microbiology & Immunology, Pathology, Pharmacology and Physiology. **History of Science is NOT a basic medical science.**

An example of courses satisfying the discipline requirement is:

- 2.0 courses in one discipline: Physiology 3120, 3140A, Physiology 4620A
- 2.0 courses in another discipline or combination of disciplines: Anatomy & Cell Biology 3309, Pharmacology 3620
- 1.0 course in any discipline: Anatomy & Cell Biology 4451A, Pharmacology 4430B

The 2.0 in a discipline can include all levels of courses (e.g. 2.0 in a combination of disciplines can include Biochemistry 3385A, Microbiology & Immunology 3300A, Microbiology & Immunology 4300A, Pharmacology 2060B)

5. You must also complete **2.0 courses at the 4000-level** courses in Year 4, in addition to Medical Sciences 4900F/G and 4930F/G. These 4000-level courses do not need to come from one discipline and can be included in the list of courses taken to meet discipline requirements, as outlined in the previous section. Course selection in Year 3 is important as you must make sure that you take the pre-requisite courses in Year 3 for the 4000-level courses you want to take in Year 4. My suggestion is to first determine which 2 or 3 basic medical sciences disciplines interest you the most. Then look in the Academic Calendar at the course descriptions for 4000-level courses from these disciplines and determine which courses peak your interest. From there, determine what courses need to be taken in Year 3 as pre-requisite courses. At this point, as well, you should check the NOTES section on the Timetable and the [Constraints charts](#) on the BMSc website to determine if these courses are available to you.

The following is important: Students in the Honors Specialization in Medical Sciences have access (priority or meet the constraints) to most basic medical science courses, however, there are usually a restricted number of spaces available to students registered in this module. Priority is always given to students who are registered in the modules in which the courses are required.

Planning for Year 4 courses:

Year 4 courses tend to be smaller (20 - 30 students, in some) and although you have access to the course there may only be 5 spaces available to students in the Honors Specialization Medical Sciences. And on occasion, a course is not offered because the instructor goes on sabbatical. For these reasons, make sure you give yourself some breathing room and be sure to take the pre-requisites in Year 3 for at least 6 different half courses at the 4000-level. **Some popular 4000-level courses with limited registration include: Physiology 4420A, 4520B, 4710A, Pharmacology 4360B, Anatomy & Cell Biology 4410A, 4411B, 4461B, and Pathology 4500B.** You may certainly try to access one of the spots in these courses but do not be disappointed if you do not gain entry. I suggest that you choose more than 6.0, 4000-level if any of these courses are part of your plan.

Constraints will not be waived nor will more spaces just appear to accommodate you. You do not want to find yourself in a situation where no courses are available to you and you must return to Western for another term to complete your degree. Information about constraints and priorities is available in chart form, by department, on the BMSc website:

<http://www.uwo.ca/bmsc/courses.htm>

Pre-requisites:

The pre-requisites for many 4000-level courses are listed in the chart below. The purpose of this chart is to assist you selection of Year 3 courses. Please confirm your selections and the pre-requisites by referring to the Academic Calendar. This cannot be emphasized enough...choose wisely in Year 3 to give yourself numerous options (from one or more disciplines) for the required 2.0 courses at the 4000-level for Year 4.

Charts summarizing the pre-requisite courses for 4000-level basic medical science courses are accessible from the "Medical Sciences" homepage on the BMSc website:

http://www.uwo.ca/bmsc/medical_sciences.htm

Year 2/3 course (mark required)	Options in Year 4
Physiology 3120, 3140A & 3130Y	All 4000-level Physiology courses
Physiology 3120 (75%) & 3140A	Physiology 4520B, 4530A, 4620A
Physiology 3120 & 3140A	Physiology 4640A, 4680B
Physiology 3120	Physiology 4700B, 4730B, Pharmacology 4320A, Anatomy & Cell Biology 4451A
Physiology 3140A	Anatomy & Cell Biology 4451A, Pharmacology 4360B
Pharmacology 3620 & 3580Y	All 4000-level Pharmacology courses
Pharmacology 3620	Pharmacology 4350A, 4360B, 4430B, 4620A, 4660A
Biochemistry 2280A & Year 4 registration	Pharmacology 4340B
Pharmacology 3620 & Physiology 3140A	Pharmacology 4380B, 4370B
Pathology 3240A (70%) & 3245B (70%)	Pathology 4400B
Pathology 3240A (75%) & 3245B (75%)	Pathology 4500B
Pathology 3240A or Anatomy & Cell Biology 3309	Anatomy & Cell Biology 4461B
Anatomy & Cell Biology 3309 (75%)	Anatomy & Cell Biology 4410A, 4411B
Biochemistry 3381A (70%)	Majority of 4000-level Biochemistry, and Microbiology & Immunology 4700B
Biochemistry 3381A	Pharmacology 4620A
Microbiology & Immunology 3300A (70%)	Microbiology & Immunology 4300A
Microbiology & Immunology 2100A, 3400B (70%)	Microbiology 4100A, 4200B
Biology 3316A (70%)	Anatomy & Cell Biology 4410A, 4411B, 4429A.

Other 2000- or 3000-level courses that are not pre-requisite courses to 4000-level courses but will fulfill discipline requirements include:

- Anatomy & Cell Biology 3319
- Biochemistry 3380G, 3385A, 3386B, 3387G
- Pharmacology 2060B (anti-requisite to Pharmacology 3620 – it may be taken before Pharmacology 3620 but not at the same time or after)
- Microbiology & Immunology 2500B (anti-requisite to 4000-level Microbiology and Immunology courses – it can be taken before 4000-level Microbiology & Immunology courses but not at the same time)

- Microbiology & Immunology 2100A (pre-requisite to Microbiology & Immunology 3400B)
- Epidemiology & Biostatistics 3330B

Some courses in year 3 require minimum marks in Year 2. Always look to the Academic Calendar to review course pre-requisites. For example, Biochemistry 3381A requires a minimum mark of 65% in each of Chemistry 2213A, 2223B and Biochemistry 2280A.

Pharmacology 3620 is new this year replacing Pharmacology 3560A and 3550B. The academic calendar has not yet been updated with this change but it will soon! This course will give you access to most 4000-level Pharmacology courses. Check out the [course outline](#) ...it looks really good!

6. You may choose to change your program/plan for Year 4. This option is available to you as you are able to access the required Year 3 courses for eligibility for the other Honors Specialization modules in Year 4. Please review the Weighted Averages Chart to make sure that you take the required courses this year to be eligible for making the change next year. Courses required in Year 3 would be listed under the "Additional Modular Courses" in the chart. The Weighted Averages chart is posted on the BMSc website: http://www.uwo.ca/bmsc/PDF/weighted_averages.pdf
NOTE: When students are selected for Year 4 Honors Specialization modules we look at the marks in the courses taken to determine eligibility; we do not consider the module of registration in Year 3.
7. Students not eligible for the Honors Specialization Medical Sciences in Year 4 will be placed in Double Majors. The minimum weighted average to register in any Honors Specialization module in the BMSc Program is 75%. For 2011/12, students needed a weighted average of 79% for admission to the Honors Specialization in Medical Sciences. It is wise to choose enough courses from two disciplines in Year 3 in case you have to complete a double major in order to graduate with an Honors BMSc degree. I would strongly recommend that you complete a laboratory course in Year 3 so the transition to a Double Major would be easier to complete, if necessary. Look at the course requirements for the Majors in the subject areas that interest you and devise an alternative plan for course selection for the next 2 years that would allow you to complete a Double Major. Remember in a BMSc degree both Majors must be from the basic medical sciences and the Common Course Policy must be considered in your selections. The policy and examples are posted at: http://www.uwo.ca/bmsc/common_courses.html
8. If you want to take more than 5.0 courses this year, you must seek permission from an Academic counsellor in the Dean's Office in WSC 191. You may do so, by emailing them at scibmsac@uwo.ca. Be sure to include your name, student number and reason for the increased load. You must call the Helpline at 519-661-2100 during extended web registration (August 26-Sept 14) for assistance in adding these extra course(s).
9. **Students leaving after Year 3:** If you are accepted into a professional program that does not require the completion of a 4-year degree, there is a chance that you will be eligible for a Year 3 BSc with a Major in Medical Sciences. If you think you will be leaving "early" and want a degree, you will need to choose your options wisely this year as completion of 2.0 essay credits, all breadth requirements plus the modular requirements for the Major in Medical Sciences will be required.
10. Although you are now registered in the Schulich School of Medicine & Dentistry, your Faculty or Academic Counselors are housed in the Dean of Science Faculty offices in WSC 191. If you have any academic-based questions for a counsellor you may contact them at 519-661-3040 for an appointment or by email at the address above. Drop-in is available from 1-3:30 p.m. each day but you are advised to check the counselling schedule as posted on the Faculty of Science website.
11. I am your departmental counsellor. If you have questions about your module please feel free to contact or see me. I see students on a drop-in basis in the afternoons between 1-3:30 p.m. on Monday to Thursday and Friday mornings between 10-12. Meetings sometimes interfere with this schedule so I also have an appointment book outside my door in MSB M138 with my availability. You may also sign up for a 30-minute appointment if you prefer.

Registration begins on July 4th for Year 3 students.