



Western
UNIVERSITY • CANADA

Prepare for Course Enrollment

Science & Basic Medical Sciences

Land Acknowledgement

We/I acknowledge that Western University is located on the traditional territories of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Chonnonton Nations, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous Peoples (First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society.

Congratulations & Welcome to Western Science!

Academic Advising is here to support you with your academic journey at Western. We are dedicated to your academic success – through:

- Advising about the impact of course selection and academic performance on eligibility for modules and degrees
- Discussing your academic pathway – adding a module, changing directions, doing an exchange, letter of permission etc.
- Being a safe, respectful, and friendly office

Degrees & Modules

A module is a collection of courses that defines an area of study. The number of courses included in the module is defined by the amount of specialization in the topic.

There are four possible modules of study which may be entered after first-year:

- Honours Specialization (9.0 or more specified courses)
- Specialization (9.0 or more specified courses)
- Major (6.0 – 7.0 specified courses)
- Minor (4.0 – 5.0 specified courses)

Modules can be combined in three different degree-types:

Degree Type	Module Combinations
Honours Bachelor Degree (4 Years/20 Courses)	<ul style="list-style-type: none">• Honours Specialization• Honours Specialization–Major• Honours Specialization–Minor• Major–Major
Bachelor Degree (4 Years/20 Courses)	<ul style="list-style-type: none">• Specialization• Specialization–Major• Specialization–Minor• Major–Major• Major• Major–Minor• Major–Minor–Minor
Bachelor Degree (3 years/15 Courses)	<ul style="list-style-type: none">• Major• Major–Minor• Minor–Minor

Module Options: Physics & Astronomy

- Honours Specialization In Astrophysics
- Honours Specialization In Medical Physics
- Honours Specialization In Physics
- Major In Astrophysics
- Major In Medical Physics
- Major In Physics
- Major In Scientific Computing & Numerical Methods
- Specialization In Astrophysics
- Specialization In Medical Physics
- Specialization In Physics
- Minor In Advanced Physics
- Minor In Astrophysics
- Minor In Conceptual Astronomy
- Minor In Physics

Year One Course Selection

WHAT Should It Include?

- 5.0 courses numbered 1000-1999
- Courses must include at least four different subjects with no more than 2.0 courses in one subject
- At least 1.0 course must be chosen from each of the three categories (A, B, and C) shown below. Any outstanding breadth requirement not completed in first year must be completed prior to graduation.

WHY Do I Need To Take These Courses?

- Choosing courses that fulfill the prerequisites for senior courses (numbered 2000 - 4999)
- Meet graduation requirements

HOW Do I Know What Courses To Select?

- Review the module(s) for the program you are interested in pursuing in the Academic Calendar

WHERE Do I Find The Academic Calendar?

- <https://www.westerncalendar.uwo.ca/>

Enrollment Tips

- Pay Attention to Course Requirements such as prerequisites and antirequisites listed in course descriptions.
- The order of when you take courses can impact your access to courses (i.e. prerequisites) and course credit (i.e. antirequisites). Compare antirequisite information of all your course selections. Keep track of antirequisites so you do not risk losing credit for a course
- Access to Courses: There may be extra enrollment conditions that restrict or delay your access to register in courses. These conditions are referred to as enrollment constraints. Refer to the Notes section in Draft My Schedule or when registering for a course to review the enrollment conditions for the course. Refer to the Enrollment Conditions/Enrollment Constraints section on the Register in Fall/Winter Courses section for more details.
- Essay v. Non-Essay courses: As part of your eventual graduation requirements, you will also be required to take essay courses. See Graduation Requirements for Essay course requirements for the degree.

Enrollment Tips - Typical Errors to Avoid

- Taking more than 1.0 course per year at an Affiliated College (Huron, King's)
- Taking senior courses (numbered 2000 or above) in first year
- Taking too many courses in one subject
- Taking inappropriate 2000-2999 levels (see the specific numbers needed for your module)
- Taking too many first year courses (max 7.0)
- Missing the Category A (e.g. Social Science) and B (e.g. Arts) requirements
- Missing the essay requirements
- Missing prerequisites for courses you are adding

Enrollment Tips - Typical Errors to Avoid

- Taking two courses that are antirequisites* (e.g. 2.0 statistics courses that can't both be counted in your program)
 - If both are taken, only the most recent course credit will be retained for credit.
 - The first course will be noted as RNC meaning repeated, no credit.
 - For example, if Math 1600A/B is completed successfully, and in the next term, a student then completes Math 1229A/B, they will lose credit for Math 1600A/B. Students are strongly advised to review pre- and anti-requisites VERY carefully!
- Overloading (max five 0.5 credit courses/term)
- Forgetting to drop second term courses if you did not complete the prerequisite

*Antirequisites are courses that contain the same or similar content

Course Suffixes

All suffixes are in upper case and indicate the following with regard to course weight and session

No suffix	1.0 course not designated as an essay course
A	0.5 course offered in first term
B	0.5 course offered in second term
A/B	0.5 course offered in first and/or second term
C	January courses in the Faculty of Law (4.0 credit weight)
D	February/March/April (FMA) courses in the Faculty of Law
E	1.0 essay course
F	0.5 essay course offered in first term
G	0.5 essay course offered in second term
F/G	0.5 essay course offered in first and/or second term
H	1.0 accelerated course (8 weeks) in the School of Nursing
J	1.0 accelerated course (6 weeks) in the School of Nursing
K	0.75 course (integrated curriculum of HBA1 program) at the Richard Ivey School of Business
L	Unassigned
M/N/P	Unassigned
Q	0.25 course offered in the first half of first term
R	0.25 course offered in the second half of first term
S	0.25 course offered in the first half of second term
T	0.25 course offered in the second half of second term
U	0.25 course offered in other than a regular session
V	0.375 course offered by the Faculty of Education
W	1.0 accelerated course offered in first term
X	1.0 accelerated course offered in second term
Y	0.5 course offered in other than a regular session
Z	0.5 essay course offered in other than a regular session

HONOURS SPECIALIZATION IN PHYSICS

FACULTY OF SCIENCE – PHYSICS AND ASTRONOMY



ADMISSION REQUIREMENTS

Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.5 principal courses, with no mark in these principal courses below 60%:

1.0 course from: ([Physics 1201A/B](#), [Physics 1401A/B](#), [Physics 1501A/B](#), the former [Physics 1301A/B](#) or 80% in the former [Physics 1028A/B](#)) and ([Physics 1202A/B](#), [Physics 1402A/B](#), [Physics 1502A/B](#), the former [Physics 1302A/B](#) or 80% in the former [Physics 1029A/B](#)).

1.0 course: ([Calculus 1000A/B](#) or [Calculus 1500A/B](#) or [Numerical and Mathematical Methods 1412A/B](#)) and ([Calculus 1501A/B](#) (recommended) or [Calculus 1301A/B](#) with a minimum mark of 85% or [Numerical and Mathematical Methods 1414A/B](#)); or the former [Applied Mathematics 1413](#) or the former [Applied Mathematics 1412A/B](#) and the former [Applied Mathematics 1414A/B](#).

0.5 course: [Mathematics 1600A/B](#) or [Numerical and Mathematical Methods 1411A/B](#) or the former [Applied Mathematics 1411A/B](#).

0.5 additional course from the Faculty of Science. It is highly recommended that students complete one of the following: [Chemistry 1301A/B](#), [Chemistry 1302A/B](#), [Computer Science 1025A/B](#) or [Computer Science 1026A/B](#), [Data Science 1000A/B](#) or the former [Statistical Science 1024A/B](#).

0.5 additional course.

Honours Specialization in Physics – First Year Course Enrollment Example

Fall Term

- Physics 1201A or Physics 1501A
- Calculus 1000A or Calculus 1500A
- Chemistry 1301A or Computer Science 1026A or Data Science 1000A
- 1.0 OR a 0.5 of Cat. A or B*
- 0.5 Elective

Winter Term

- Physics 1202B or Physics 1502B
- Calculus 1301B or 1501B (recommended)
- Math 1600B
- Continuation of the 1.0 OR a new 0.5 course from Cat A or B*
- 0.5 Elective

*only Science allows students to split their Cat A/Cat B for their Yr. 1 requirements. We recommend 1.0 in either A or B

Honours Specialization in Physics

MODULE/PROGRAM INFORMATION

Module

10.0 courses:

1.0 course: [Calculus 2502A/B](#), [Calculus 2503A/B](#).

1.0 course: [Applied Mathematics 2402A/B](#) (or the former [Differential Equations 2402A](#)), [Applied Mathematics 3815A/B](#).

1.0 course: [Physics 2101A/B](#), [Physics 2102A/B](#).

1.0 course: [Physics 2110A/B](#), [Physics 2910F/G](#) (or the former [Physics 2900E](#)).

3.0 courses: [Physics 3151A/B](#), [Physics 3200A/B](#), [Physics 3300A/B](#), [Physics 3400A/B](#), [Physics 3900F/G/Z](#), [Physics 3926F/G](#).

1.0 course: [Physics 4251A/B](#), [Physics 4351A/B](#).

1.5 course from: any Physics or Astronomy course not yet taken numbered 2100 or above, [Chemistry 4424A/B](#).

0.5 course from: any Physics or Astronomy course not already taken at the 4000 level or above.

Students must also complete [Physics 2950Y](#), [Physics 3950Y](#), [Physics 4950Y](#) (non-credit seminar courses).

(Some) Questions Submitted

- What is the difference between Physics 1201A/B, 1401A/B, and Physics 1501A/B?
- Are we permitted to take certain courses a second time to obtain a better grade?
- When are students eligible for exchange or study abroad?
- Difficulty vs. Passion – when option exists, how do you decide which to choose?
- If you have been awarded credit for a course upon admission, will this automatically count towards minimum first year course requirements?
- When adding courses to your calendar – do we add every individual lab and lecture separately?

Questions?

Continue the Conversation....

Welcome Wednesdays

Connect with Science & Basic Medical Sciences Academic Advising office to discuss your academic related questions in advance of course registration & the start of the academic year.

June – August:

- Virtual Zoom Same-Day Appointments every Wednesday
- 10:00 a.m. – 12:00 p.m. (EDT)
- Log in using the Meeting ID: 944 8503 6022 with the password 745451

September – April:

- In Person at our office
- 10:00 a.m. – 12:00 p.m. (EDT)
- North Campus Building, 2nd Floor, Room 280

Thank You!

Academic Advising

Your one-stop-shop
for academic support!



<https://uwo.ca/sci/counselling/>



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