SCHULICH SCHOOL OF MEDICINE & DENTISTRY AND FACULTY OF SCIENCE

Honors Specialization in Medical Biophysics (Medical Science Concentration), Specialization in Medical Biophysics, and Major in Medical Biophysics

REVISED CALENDAR COPY
(Pages 209-210 of the 2013/14 Academic Calendar and
http://westerncalendar.uwo.ca/2013/pg700.html of the 2013/14 online Academic Calendar)

HONORS SPECIALIZATION IN MEDICAL BIOPHYSICS (MEDICAL SCIENCE CONCENTRATION)
This module leads to an Honors Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Students entering Year 2, ***3 or 4*** in September 2013 should see the Admission Requirements in the 2012/13 Academic Calendar.

Students will not be admitted to Year 2 of the Honors Specialization module beginning in September, 2014.

Admission Requirements, effective September 1, 2015 (for students admitted to Year 1 in September, 2013):
Admission to this Honors Specialization module occurs in Year 3 and requires admission to the Year 3 of the Bachelor of Medical Sciences (BMSc) Program. Students will usually complete the MEDICAL SCIENCES FIRST ENTRY PROGRAM (Medical Sciences 1 and 2) prior to admission to the Honors Specialization module. Enrolment in this Honors Specialization module is limited and meeting the minimum requirements does not guarantee admission.

The 1000-level half courses listed below must each be completed with a mark of at least 60%:

1.0 course: Biology 1001A* and 1002B*
1.0 course: Chemistry 1301A/B and 1302A/B
0.5 course from: Calculus 1000A/B, 1500A/B, ***or the former*** 1100A/B
0.5 course from: Calculus 1301A/B, 1501A/B
0.5 course from: Physics 1028A/B~~**~~, 1301A/B, 1501A/B (one of 1301A/B or 1501A/B is preferred)
0.5 course from: Physics 1029A/B~~**~~, 1302A/B, 1502A/B (one of 1302A/B or 1502A/B is preferred)

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

~~** A minimum mark of 80% in each of Physics 1028A/B and 1029A/B is required as a prerequisite for Physics 2101A/B and 2102A/B.~~

The 2000-level courses below must be completed with a minimum mark of 60% in each prior to admission to the Honors Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for additional average, course load requirements, etc. and MODULES OFFERED IN THE BMSc PROGRAM for specific information about Honors Specialization modules, including the Weighted Average Chart.

~~1.0 course from: Medical Biophysics 2128A/B and 2129A/B, or Physics 2128A/B and 2129A/B, or Physics 2101A/B and 2102A/B~~
~~0.5 course from: Calculus 2302A/B, 2502A/B~~
~~0.5 course from: Calculus 2303A/B, 2503A/B~~
0.5 course: Biochemistry 2280A
0.5 course: Chemistry 2213A/B
~~0.5 course from: Biology 2382B, 2581B, Chemistry 2214A/B, Medical Biophysics 3336F/B (may be delayed until Year 3)~~
0.5 course: Computer Science 2035A/B
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B ~~(may be delayed until Year 3)~~

Module
9.5 courses:
~~0.5 course from: Calculus 2302A/B, 2502A/B~~
~~0.5 course from: Calculus 2303A/B, 2503A/B~~
0.5 course: Biochemistry 2280A
0.5 course: Chemistry 2213A/B
0.5 course: Computer Science 2035A/B
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B, or the former Statistical Sciences 2122A/B
0.5 course from: Biology ***2290F/G,*** 2382B, 2581B, Chemistry 2214A/B, Medical Biophysics 3336F/G
1.0 course from: Physics 2101A/B and 2102A/B***, Physiology 2130 or 3120, or the former*** Medical Biophysics 2128A/B, 2129A/B, Physics 2128A/B, 2129A/B
1.5 courses: Medical Biophysics 3501F, 3503G, 3970Z, or the former Medical Biophysics 3302E*
1.0 course: Medical Biophysics 3505F and 3507G, or the former Medical Biophysics 3303E
~~0.5~~ ***1.0*** course: Medical Biophysics 3330F/G ***and 3645A/B***
1.0 course from: Medical Biophysics 4445A/B, 4455A/B, 4467A/B, 4475A/B, 4535A/B
1.5 courses**:** Medical Biophysics 4970E (Research Project = 1.5 courses)

Note: Some modular courses include a mark requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.

REVISED CALENDAR COPY
http://www.westerncalendar.uwo.ca/2013/pg1686.html

WEIGHTED AVERAGE CHART

Medical Biophysics (Medical Sciences Concentration) ***– for students entering Year 4 in 2013/14. Students entering Year 3 in 2013/14 have the choice of completing the module as it appears in either the 2012/13 Academic Calendar or the 2013/14 Academic Calendar (using the corresponding Weighted Average).***	3.5 courses: Biochemistry 2280A; Calculus 2302A/B or 2502A/B; Calculus 2303A/B or 2503A/B; Chemistry 2213A/B; Physics 2101A/B and 2102A/B; Biology 2244A/B or Statistical Sciences 2244A/B.	3.0 courses: Medical Biophysics 3330F/G, 3501F, 3503G, 3505F, 3507G and 3970Z.
Medical Biophysics (Medical Sciences Concentration) – for students entering Year 2 as of 2013/14. Students entering Year 3 in 2013/14 have the choice of completing the module as it appears in either the 2012/13 Academic Calendar or the 2013/14 Academic Calendar (using the corresponding Weighted Average).	***3.0 courses: Biochemistry 2280A; Chemistry 2213A/B; Physics 2101A/B and 2102A/B or Physiology 2130 or 3120; Biology 2244A/B or Statistical Sciences 2244A/B; Computer Science 2035A/B.***	***3.5 courses: Medical Biophysics 3330F/G, 3501F, 3503G, 3505F, 3507G, 3645A/B and 3970Z.***

REVISED CALENDAR COPY
(page 211 of the 2013/14 Academic Calendar and
http://westerncalendar.uwo.ca/2013/pg703.html of the 2013/14 online Academic Calendar)

SPECIALIZATION IN MEDICAL BIOPHYSICS
This module leads to a Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Students entering Year 2***, 3 or 4*** in September 2013 should see the Admission Requirements in the 2012/13 Academic Calendar.

Students will not be admitted to Year 2 of the Specialization module beginning in September, 2014.

Admission Requirements, effective September 1, 2015 (for students admitted to Year 1 in September, 2013):
Admission to this Specialization module occurs in Year 3 and requires admission to Year 3 of the Bachelor of Medical Sciences (BMSc) Program. Students will usually complete the MEDICAL SCIENCES FIRST ENTRY PROGRAM (Medical Sciences 1 and 2) prior to admission to the Specialization module.

The 1000-level half courses listed below must each be completed with a mark of at least 60%:

1.0 course: Biology 1001A* and Biology 1002B*
1.0 course: Chemistry 1301A/B and 1302A/B
0.5 course from: Calculus 1000A/B, ~~or 1100A/B or~~ 1500A/B
0.5 course from: Calculus 1301A/B, 1501A/B
0.5 course from: Physics 1028A/B~~**~~, Physics 1301A/B, 1501A/B (one of Physics 1301A/B or 1501A/B is preferred)
0.5 course from: Physics 1029A/B~~**~~, Physics 1302A/B, 1502A/B (one of Physics 1302A/B or 1502A/B is preferred)

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

~~** A minimum mark of 80% in each of Physics 1028A/B and 1029A/B is required as a prerequisite for Physics 2101A/B and 2012A/B.~~

The courses below must be completed with a minimum mark of 60% in each prior to admission to the Specialization module in Year 3. These courses will also be used towards the Module requirements. See ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM and MODULES OFFERED IN THE BMSc PROGRAM for additional requirements (averages, course load, etc.).

~~1.0 course from: Medical Biophysics 2128A/B and 2129A/B, or Physics 2128A/B and 2129A/B, or Physics 2101A/B and 2102A/B~~
~~0.5 course from: Calculus 2302A/B, 2502A/B~~
~~0.5 course from: Calculus 2303A/B, 2503A/B~~
0.5 course: Biochemistry 2280A
0.5 course: Chemistry 2213A/B
0.5 course: Computer Science 2035A/B
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B ~~(may be delayed until Year 3)~~

Module
9.0 courses:
~~0.5 course from: Calculus 2302A/B, 2502A/B~~
~~0.5 course from: Calculus 2303A/B, 2503A/B~~
0.5 course: Biochemistry 2280A
0.5 course: Chemistry 2213A/B
0.5 course: Computer Science 2035A/B
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B, or the former Statistical Sciences 2122A/B
1.0 course from: Physics 2101A/B and 2102A/B, ***or Physiology 2130, or the former*** Medical Biophysics 2128A/B, 2129A/B, Physics 2128A/B, 2129A/B
3.0 course***s***: Medical Biophysics 3501F and 3503G (or the former 3302E), 3505F and 3507G (or the former 3303E), 3330F/G, ~~3336F/G~~ ***3645A/B***
~~0.5~~ ***1.5*** course***s*** from: Medical Biophysics ***4445A/B, 4455A/B,*** 4467A/B, ***4475A/B,*** 4535A/B
~~2.5~~ ***1.5*** courses from: Applied Mathematics 2402A, ***2811B,*** 2813B, 3615A/B, Biology 2290F/G, 2382B, 2581B, Chemistry 2214A/B***, 2223B,*** Mathematics 1600A/B, ~~Medical Biophysics 3330F/G, 3336F/G, 3970Z, 4467A/B, 4475A/B, 4535A/B~~, ***3000- and 4000-level courses in Medical Biophysics (with the exception of 4970E and 4971E), Pathology 3240A, 3245B, Physics 2101A/B, 2102A/B, 2110A/B,*** Physiology 2130 ~~or 3120~~, or the former Chemistry 2274A, Differential Equations 2402A, Linear Algebra 1600A/B

Notes: Some modular courses include a mark requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.

REVISED CALENDAR COPY
(page 210 of the 2013/14 Academic Calendar and
http://westerncalendar.uwo.ca/2013/pg702.html of the 2013/14 online Academic Calendar)

MAJOR IN MEDICAL BIOPHYSICS
A degree containing this module normally requires 4 years for completion. When combined with one of the following Majors, this module leads to a Bachelor of Medical Sciences (BMSc) degree: Biochemistry, Interdisciplinary Medical Sciences (IMS) or Medical Sciences (see note below), Medical Cell Biology, Microbiology and Immunology, Pharmacology or Physiology. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Note: Students registered in Year 3 or 4 of a BMSc degree in 2013/14 will register in a Major in Medical Sciences, whereas students registered in Year 2 of a BMSc degree in 2013/14 will register in a Major in IMS.

Students entering Year 2, ***3 or 4*** in September 2013 should see the Admission Requirements in the 2012/13 Academic Calendar.

Students pursuing a Bachelor of Medical Sciences (BMSc) degree will not be admitted to Year 2 of the Major beginning in September 2014. Students in other degrees will continue to be admitted to the Major in Year 2.

Admission Requirements for students pursuing this Major module in a Bachelor of Medical Sciences (BMSc) degree, effective September 1, 2015 (for students admitted to Year 1 in September 2013):
Admission to this Major module occurs in Year 3 and requires admission to ~~the~~ Year 3 of the Bachelor of Medical Sciences (BMSc) Program. Students will usually complete the MEDICAL SCIENCES FIRST ENTRY PROGRAM (Medical Sciences 1 and 2) prior to admission to Double Major modules in a BMSc degree.

1.0 course: Biology 1001A* and Biology 1002B*
1.0 course: Chemistry 1301A/B and 1302A/B
0.5 course from: Calculus 1000A/B, ~~1100A/B,~~ 1500A/B
0.5 course from: Calculus 1301A/B, 1501A/B
0.5 course from: Physics 1028A/B~~**~~, Physics 1301A/B, 1501A/B (one of Physics 1301A/B or 1501A/B is preferred)
0.5 course from: Physics 1029A/B~~**~~, Physics 1302A/B, 1502A/B (one of Physics 1302A/B or 1502A/B is preferred).

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

~~** A minimum mark of 80% in each of Physics 1028A/B and 1029A/B is rquired as a prerequisite for Physics 2101A/B and 2102A/B.~~

The course~~s~~ below must be completed with a minimum mark of 60% ~~in each~~ prior to admission to the Major module in Year 3. ~~These~~***This*** course~~s~~ will also be used towards the Module requirements. See ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM and MODULES OFFERED IN THE BMSc PROGRAM for additional requirements (averages, course load, etc.).

~~0.5 course from: Calculus 2302A/B, 2502A/B~~
~~0.5 course from: Calculus 2303A/B, 2503A/B~~
~~1.0 course from: Medical Biophysics 2128A/B and 2129A/B, or Physics 2128A/B and 2129A/B, or Physics 2101A/B and 2102A/B~~
0.5 course: Computer Science 2035A/B

Admission Requirements for students pursuing this Major module in a degree other than a Bachelor of Medical Sciences (BMSc) degree:
Completion of first-year requirements, including a mark of at least 60% in each of the 4.0 (full or half) principal courses below:

1.0 course: Biology 1001A* and Biology 1002B* (may be deferred until Year 2), or the former Biology 1222 or 1223
1.0 course: Chemistry 1301A/B and 1302A/B, or the former 1100A/B and 1200B, 1020, 1050
0.5 course from: Calculus 1000A/B, 1500A/B***, or the former*** 1100A/B
0.5 course from: Calculus 1301A/B, 1501A/B
0.5 course from: Physics 1028A/B~~**~~, Physics 1301A/B, 1501A/B (one of Physics 1301A/B or 1501A/B is preferred)
0.5 course from: Physics 1029A/B~~**~~, Physics 1302A/B, 1502A/B (one of Physics 1302A/B or 1502A/B is preferred)

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

~~** A minimum mark of 80% in each of Physics 1028A/B and 1029A/B is required as a prerequisite for Physics 2101A/B and 2102A/B.~~

Module
6.0 courses:
~~0.5 course from: Calculus 2302A/B, 2502A/B~~
~~0.5 course from: Calculus 2303A/B, 2503A/B~~
0.5 course: Computer Science 2035A/B
1.0 cours**e** from: Physics 2101A/B and 2102A/B, ***Physiology 2130, or the former*** Medical Biophysics 2128A/B, 2129A/B, Physics 2128A/B, 2129A/B
2.5 courses: Medical Biophysics 3330F/G 3501F, 3503G, ***3645A/B,*** 3970Z
1.0 course: Medical Biophysics 3505F and 3507G, or the former Medical Biophysics 3303E
1.0 course from: Medical Biophysics 4445A/B, 4455A/B, 4467A/B, 4475A/B, 4535A/B

Note: Students having completed the former Medical Biophysics 3302E will use this course and 0.5 course from the following list, in lieu of Medical Biophysics 3501F, 3503G and 3970Z: Biology 2244A/B, Chemistry 2214A/B, Engineering Science 1036A/B, Medical Biophysics 3336F/G, ***Statistical Sciences 2244A/B***, or the former Statistical Sciences 2122A/B.

Note: Some modular courses include a mark requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.