

**Course and Program Changes
2010-2011
April 15, 2009 Council Meeting**

CURRENT (page 345, 2009-2010 calendar)

192.1 Faculty Overview

The Faculty of Science offers degrees in Actuarial Science, Applied Mathematics, Atmospheric Sciences, Biochemistry, Bioinformatics, Biological Sciences (Animal Biology, ~~Cell Biotechnology~~, Environmental Biology, Evolutionary Biology, Microbiology, Molecular Genetics, Physiology and Developmental Biology, Plant Biology), Chemistry, Cell Biology, Computing Science, Computing Science with a Business Minor, Computing Science with Specialization in Bioinformatics, Computing Science-Software Quality Option, Computational Science (Mathematics or Physics), Environmental Earth Sciences, Environmental Physical Sciences, Geology, Geophysics, Immunology and Infection, Mathematical Physics, Mathematics, Mathematics and Economics, Mathematics and Finance, Neuroscience, Paleontology, Pharmacology, Physics, Physiology, Psychology, and Statistics.

PROPOSED

192.1 Faculty Overview

The Faculty of Science offers degrees in Actuarial Science, Applied Mathematics, Atmospheric Sciences, Biochemistry, Bioinformatics, Biological Sciences (Animal Biology, Environmental Biology, Evolutionary Biology, Microbiology, Molecular Genetics, Physiology and Developmental Biology, Plant Biology), Chemistry, Cell Biology, Computing Science, Computing Science with a Business Minor, Computing Science with Specialization in Bioinformatics, Computing Science-Software Quality Option, Computational Science (Mathematics or Physics), Environmental Earth Sciences, Environmental Physical Sciences, Geology, Geophysics, Immunology and Infection, Mathematical Physics, Mathematics, Mathematics and Economics, Mathematics and Finance, Neuroscience, Paleontology, Pharmacology, Physics, Physiology, Psychology, and Statistics.

Course Changes

CURRENT	PROPOSED
<p>BIOL 391 Techniques in Molecular Biology and Bioinformatics *3 (<i>fi</i> 6) (either term, 0-1s-6). A laboratory course introducing students to techniques in gene manipulation, protein expression and bioinformatics by following a gene through a thematic series of molecular manipulations. Restricted to Honors and Specialization students in Biological Sciences and consent of instructor. Prerequisites: BIOL 207 and BIOCH 200. Not to be taken by students currently enrolled in GENET 420 or with credit in GENET 420.</p>	<p>BIOL 391 Techniques in Molecular Biology and Bioinformatics *3 (<i>fi</i> 6) (either term, 0-1s-6). A laboratory course introducing students to techniques in gene manipulation, protein expression and bioinformatics by following a gene through a thematic series of molecular manipulations. Restricted to Honors and Specialization students in Biological Sciences and consent of instructor. Prerequisites: BIOL 207 and BIOCH 200. Not to be taken by students currently enrolled in GENET 420 or with credit in GENET 420. Credit can be obtained for only one of BIOL 391, IMIN 391 or MMI 391.</p>
<p>BOT 380 Drug Plants *3 (<i>fi</i> 6) (second term, 3-0-0). Survey of historical and current use of important drug-producing plants. Evaluation of the chemistry and physiology of biologically active compounds from poisonous, analgesic, and hallucinogenic plants, and the current uses of such plant products. Use of plant biotechnology to develop drug-producing plants. Prerequisite: A 200-level Biological Sciences course. BOT 205 recommended.</p>	<p>BOT 380 Drug Plants *3 (<i>fi</i> 6) (second term, 3-0-0). Survey of historical and current use of important drug-producing plants. Evaluation of the chemistry and physiology of biologically active compounds from poisonous, analgesic, and hallucinogenic plants, and the current uses of such plant products. Use of plant biotechnology to develop drug-producing plants. Prerequisite: A 200-level Biological Sciences course or BIOCH 200. BOT 205 recommended.</p>

<p>IMIN 391 Current Methods in Molecular Biology *3 (first term, 0-0-8). This laboratory course will introduce the student to common techniques in molecular biology. Through a series of experiments, students will clone and express the genes for bioluminescence from the light-emitting bacterium <i>Vibrio fischeri</i>. Technical skills will include: preparation and quantification of genomic and plasmid DNAs, screening a genomic library, restriction mapping, amplification of DNA fragments using the polymerase chain reaction, Southern blotting, expression and purification of proteins, and detection of proteins by Western blotting. Prerequisites: Completion of IMIN second-year and/or department consent. Priority given to students in the IMIN program.</p>	<p>DELETE COURSE</p>
<p>NEW COURSE</p>	<p>MMI 391 Current Methods in Molecular Biology *3 (first term, 0-0-8). This laboratory course will introduce the student to common techniques in molecular biology. Through a series of experiments, students will clone and express the genes for bioluminescence from the light-emitting bacterium <i>Vibrio fischeri</i>. Technical skills will include: preparation and quantification of genomic and plasmid DNAs, screening a genomic library, restriction mapping, amplification of DNA fragments using the polymerase chain reaction, Southern blotting, expression and purification of proteins, and detection of proteins by Western blotting. Prerequisites: IMIN 200 and department consent. Priority given to Honors students in the IMIN program. Credit can be obtained for only one of BIOL 391, IMIN 391 or MMI 391.</p>
<p>NEW COURSE</p>	<p>IMIN 405 Innate Immunity *3 (fi 6) (first term 3-0-0). This course covers topics of innate immunity with emphasis on strategies for pathogen recognition, local and systemic activation of the innate immune response, and regulation of innate effector mechanisms. Innate defense strategies against pathogens as well as detection and elimination of tumors will also be covered. Lectures will be followed by active discussions of selected readings pertaining to current research in the subject area. Prerequisites: IMIN 371 or consent of instructor. Credit cannot be obtained for both IMIN 405 and 505. (Offered jointly by the Departments of Biological Sciences and Medical Microbiology and Immunology). [Biological Sciences].</p>

<p>IMIN 410 Bioinformatics for Molecular Biologists *3 (second term, 3-0-1). This course will introduce the student to common and advanced methods in bioinformatics. In a mix of lectures and hands-on computer sessions, the student will solve realistic biological questions in the areas of sequence analysis, distant homology detection, phylogeny, correlating sequence to structure, protein structure analysis, genomics, and proteomics. The student will obtain a thorough understanding of bioinformatics methods but the focus is on application of methods in the context of molecular biology research rather than studying details of the algorithms or computer programming. Prerequisites: Department consent. Priority given to senior students in the IMIN program and MMI graduate students.</p>	<p>IMIN 410 Bioinformatics for Molecular Biologists *3 (second term, 3-0-1). This course will introduce the student to common and advanced methods in bioinformatics. In a mix of lectures and hands-on computer sessions, the student will solve realistic biological questions in the areas of sequence analysis, distant homology detection, phylogeny, correlating sequence to structure, protein structure analysis, and genomics. The student will obtain a thorough understanding of bioinformatics methods, but the focus is on application of methods in the context of molecular biology research rather than studying details of the algorithms or computer programming. Prerequisite: Consent of instructor, BIOCH 320 or 330 highly recommended. Priority given to senior students in the IMIN program.</p>
<p>New Course</p>	<p>IMIN 505 Advanced Innate Immunity *3 (fi 6) (first term 3-0-0). This course covers topics of innate immunity with emphasis on strategies for pathogen recognition, local and systemic activation of the innate immune response, and regulation of innate effector mechanisms. Innate defense strategies against pathogens as well as detection and elimination of tumors will also be covered. Lectures will be followed by active discussions of selected readings pertaining to current research in the subject area. Lectures and graded discussions are the same as for IMIN 405 but with evaluation appropriate for graduate students. Prerequisites: consent of instructor. Credit cannot be obtained for both IMIN 405 and 505. (Offered jointly by the Departments of Biological Sciences and Medical Microbiology and Immunology). [Biological Sciences].</p>
<p>IMIN 510 Bioinformatics for Molecular Biologists *3 (second term, 3-0-1). This course will introduce the student to common and advanced methods in bioinformatics. In a mix of lectures and hands-on computer sessions, the student will solve realistic biological questions in the areas of sequence analysis, distant homology detection, phylogeny, correlating sequence to structure, protein structure analysis, genomics, and proteomics. The student will obtain a thorough understanding of bioinformatics methods but the focus is on application of methods in the context of molecular biology research rather than studying details of the algorithms or computer programming. Prerequisites: Department consent. Priority given to senior students in the IMIN program and MMI graduate students.</p>	<p>DELETE COURSE</p>

NEW COURSE	<p>MMI 510 Bioinformatics for Molecular Biologists *3 (second term, 3-0-1). This course will introduce the student to common and advanced methods in bioinformatics. In a mix of lectures and hands-on computer sessions, the student will solve realistic biological questions in the areas of sequence analysis, distant homology detection, phylogeny, correlating sequence to structure, protein structure analysis, and genomics. The student will obtain a thorough understanding of bioinformatics methods, but the focus is on application of methods in the context of molecular biology research rather than studying details of the algorithms or computer programming. Students must as a final assignment write a mini-proposal for a molecular biology research project that incorporates a series of bioinformatics studies to complement and guide the experimental work. May not be taken for credit if credit already obtained in IMIN 410. Prerequisite: consent of instructor. Priority given to MMI graduate students.</p>
------------	---

Program Changes

Animal Biology Program Change (2010-2011 Calendar)

	Year 1	Year 2	Years 3 and 4
C u r r e n t	<p>Year 1 BIOL 107, 108; CHEM 101, 164 or 261; MATH 113 or 114 or 120; STAT 151 *6 Arts options (WRS 101 or junior English recommended) *6 Science options</p>	<p>BIOCH 200; BIOL 201 or CELL 201; BIOL 207, 208; ZOOL 224; ZOOL 250 or ENT 220; ZOOL 241 or 242 *6 approved options *3 Arts options</p>	<p>BIOL 321; BIOL 331 or 332; ENT 220 or ZOOL 250 or ZOOL 352; GENET 270 or 275 or 390 ENT 302 or ZOOL 303; ZOOL 325; ZOOL 370 or 371 *9 Arts options *15 from List A *3 from List B *12 approved options (including additional courses from List A or B). List A: BIOL 330, 331, 332, 335, 361, 380, 400, 430, 490, 495, 498, 499; EAS 230; ENT 207, 220, 302, 321, 378, 380, 392, 427; MA SC 410, 412, 430, 440; PALEO 418, 419; ZOOL 241, 242, 250, 303, 340, 342, 343, 351, 352, 354, 370, 371, 405, 407, 408, 452. List B: BIOL 433, 434, 468, 495 (if appropriate topic); ENT 401; MA SC 480; ZOOL 402, 441, 442, 472. Available streams include: entomology, marine biology, parasitology and vertebrate biology. Notes: (1) MA SC courses on this list are offered at Bamfield Marine Sciences Centre. (2) Honors students are required to take BIOL 499 and reduce approved options by *6.</p>

	Year 1	Year 2	Years 3 and 4
P r o p o s e d	No change	No change	BIOL 321; BIOL 331 or 332; ENT 220 or ZOOL 250 or ZOOL 352; GENET 270 or 275 or 390 ENT 302 or ZOOL 303; ZOOL 325; ZOOL 370 or 371 *9 Arts options *15 from List A *3 from List B *12 approved options (including additional courses from List A or B). List A: BIOL 330, 331, 332, 335, 361, 380, 400, 430, 490, 495, 498, 499; EAS 230; ENT 207, 220, 302, 321, 378, 380, 392, 427; MA SC 410, 412, 430, 440; PALEO 418, 419; ZOOL 241, 242, 250, 303, 340, 342, 343, 351, 352, 354, 370, 371, 405, 406, 407, 408, 450, 452. List B: BIOL 433, 434, 468, 495 (if appropriate topic); ENT 401; MA SC 480; ZOOL 402, 441, 442, 472. Available streams include: entomology, marine biology, parasitology and vertebrate biology. Notes: (1) MA SC courses on this list are offered at Bamfield Marine Sciences Centre. (2) Honors students are required to take BIOL 499 and reduce approved options by *6.

Bioinformatics Program Change (2010-2011 Calendar)

	Year 1	Year 2	Year 3 and 4
C u r r e n t	Year 1 BIOL 107, 108; CHEM 101, 102, 164 or 261; *6 Arts options (WRS 101 or junior English recommended) One set from the following 3 sets of courses: (1) CMPUT 101, 114, 115 (CMPUT 101 and 114 concurrently) OR (2) CMPUT 114 and 115 and *3 in a Science option OR (3) CMPUT 174, 175 and *3 in a Science option	BIOCH 200; BIOL 207, 208; CHEM 263; CMPUT 201, 291; GENET 270; MATH 113 or 114 or 117; MATH 120 or 125; STAT 151 Note: GENET 270 may be taken in Year 3.	One of BIOCH 310, 320, 330; BIOIN 301, 401; CMPUT 204, 272, 301 *6 in GENET 275, 301, 302, 304, or 390 *12 Arts Options *3 CMPUT from recommended options below *21 Science Options Recommended options include, but are not restricted to additional courses from above and the following: BIOCH 310, 320, 330, 420; BIOL 321, 380, 391, 400, 490, 495, 498, 499, 520; CMPUT 229, 304, 325, 340, 366, 379, 391, 466, 474, 495; GENET 275, 301, 302, 304, 390; IMIN 200; MICRB 265, 316; STAT 221, 222, 337. Notes: (1) First-year core Math and Stats courses are taken in Year 2. (2) Honors students are required to take BIOL 499 and reduce Science options by *6.
P			

r o p o s e d	Year 1 No change	No change	<p>One of BIOCH 310, 320, 330; BIOIN 301, 401; CMPUT 204, 272, 301 *6 in GENET 275, 301, 302, 304, or 390 *12 Arts Options *3 CMPUT from recommended options below *21 Science Options</p> <p>Recommended options include, but are not restricted to additional courses from above and the following: BIOCH 310, 320, 330, 420; BIOL 321, 380, 391, 400, 421, 490, 495, 498, 499, CMPUT 229, 304, 325, 340, 366, 379, 391, 466, 474, 495; GENET 275, 301, 302, 304, 390; IMIN 200; MICRB 265, 316; STAT 221, 222, 337.</p> <p>Notes: (1) First-year core Math and Stats courses are taken in Year 2. (2) Honors students are required to take BIOL 499 and reduce Science options by *6.</p>
--	----------------------------	-----------	---

Ecology Program Change (2010-2011 Calendar)

	Year 1	Year 2	Years 3 and 4
C u r r e n t	<p>Year 1 BIOL 107, 108; CHEM 101, 164 or 261; MATH 113 or 114 or 120; STAT 151 *6 Arts options (WRS 101 or junior English recommended) *6 Science options (EAS 100 recommended)</p>	<p>BIOCH 200; BIOL 207, 208; BOT 205; MICRB 265; ZOOL 224 or 325; ZOOL 250 or ENT 220 *9 in an Arts option</p>	<p>BIOL 321, 330 *12 from BIOL 331, 332, 340; BOT 332; ZOOL 371 *3 from BIOL 380; BOT 303, 340; ENT 302, 321; GENET 270, 275; IMIN 200; MICRB 311; ZOOL 241, 242, 303 *6 from BOT 306, 310, 314, 321, 322, 330; ENT 427; ZOOL 351, 352, 405, 407, 408 *9 from BIOL 333, 361, 364, 366, 367, 381, 430, 433, 434, 450, 464, 468, 470, 490, 498, 499; BOT 384; MICRB 491; ZOOL 340, 354, 370, 472 *3 Arts option *18 approved options *3 from BIOL 365, 432; MA SC 4XX, ZOOL 434</p> <p>Available streams include: conservation/wildlife biology, freshwater biology, and plant ecology.</p> <p>Note: (1) MA SC courses on this list are offered at Bamfield Marine Sciences Centre. (2) Honors students are required to take BIOL 430 and 499 and reduce approved options by *9.</p>
	Year 1	Year 2	Years 3 and 4
P r o p o s e d	No change	No change	<p>BIOL 321, 330 *12 from BIOL 331, 332, 340; BOT 332; ZOOL 371 *3 from BIOL 380; BOT 303, 340; ENT 302, 321; GENET 270, 275; IMIN 200; MICRB 311; ZOOL 241, 242, 303 *6 from BOT 306, 310, 314, 321, 322, 330;</p>

		<p>ENT 427; ZOOL 351, 352, 405, 406, 407, 408 *9 from BIOL 333, 361, 364, 366, 367, 381, 430, 433, 434, 450, 464, 468, 470, 490, 498, 499; BOT 384; MICRB 491; ZOOL 340, 354, 370, 472 *3 Arts option *18 approved options *3 from BIOL 365, 432; MA SC 4XX, ZOOL 434 Available streams include: conservation/wildlife biology, freshwater biology, and plant ecology. Note: (1) MA SC courses on this list are offered at Bamfield Marine Sciences Centre. (2) Honors students are required to take BIOL 430 and 499 and reduce approved options by *9.</p>
--	--	--

Evolutionary Biology (2010-2011 Calendar)

	Year 1	Year 2	Year 3 and 4
C u r r e n t	<p>BIOL 107, 108; CHEM 101, 164 or 261; MATH 113 or 114 or 120; STAT 151 *6 Arts options (WRS 101 or junior English recommended) *6 Science options</p>	<p>BIOCH 200; BIOL 207, 208, 321 *6 from BOT 205, 210; ENT 207, 220, 380; MICRB 265; ZOOL 224, 250 *3 from BOT 340; ENT 321; ZOOL 241, 242 *3 Arts option *6 approved options</p>	<p>BIOL 335, 380, 392 *3 from BOT 411; PALEO 418, 419 *3 from BIOL 331, 332; BOT 332 *3 from GENET 270, 275, 390 *6 from BOT 306, 310, 314, 321; ENT 427; ZOOL 325, 405, 407, 408 *9 Arts options *12 approved options *15 from list below Recommended options include, but are not restricted to additional courses from above, and the list below: BIOL 400, 421, 430, 433, 450, 490, 495, 498, 499; BOT 303, 308, 322, 330, 350, 506, 511; EAS 100, 105, 230; ENT 302; GENET 270; MA SC 410, 412, 420, 430, 440, 445; PALEO 414; ZOOL 303, 340, 351, 352, 354, 371, 402, 434, 472. Notes: 1) Marine Science courses on this list are offered at Bamfield Marine Sciences Centre. (2) Honors students are required to take BIOL 499 and reduce approved options by *6.</p>
P r o p o s e d	<p>No change</p>	<p>No change</p>	<p>BIOL 335, 380, 392 *3 from BOT 411; PALEO 418, 419 *3 from BIOL 331, 332; BOT 332 *3 from GENET 270, 275, 390 *6 from BOT 306, 310, 314, 321; ENT 427; ZOOL 325, 405, 406, 407, 408 *9 Arts options *12 approved options *15 from list below Recommended options include, but are not restricted to additional courses from above, and the list below:</p>

		<p>BIOL 400, 421, 430, 433, 450, 490, 495, 498, 499; BOT 303, 308, 322, 330, 350, 506, 511; EAS 100, 105, 230; ENT 302; GENET 270; MA SC 410, 412, 420, 430, 440, 445; PALEO 414; ZOOL 303, 340, 351, 352, 354, 371, 402, 434, 450, 472.</p> <p>Notes: 1) Marine Science courses on this list are offered at Bamfield Marine Sciences Centre. (2) Honors students are required to take BIOL 499 and reduce approved options by *6.</p>
--	--	---

Physiology & Developmental Biology (2010-2011)			
	Year 1	Year 2	Years 3 and 4
C u r r e n t	<p>BIOL 107, 108; CHEM 101, 164 or 261; MATH 113 or 114 or 120; STAT 151 *6 Arts options (WRS 101 or junior English recommended) *6 Science options</p>	<p>BIOCH 200; BIOL 201 or CELL 201; BIOL 207, 208; ZOOL 241, 242, 250 *3 Arts option *6 approved options Note: students intending to take BIOCH 310, 320 or 330 are required to take CHEM 263</p>	<p>ZOOL 303, 325, 344 *3 from ZOOL 402, 441, 442 or BIOL 545 *3 from BIOCH 310, 320, 330 or CELL 300 *9 from ZOOL 340, 342, 343, 352 or BIOL 391 *9 Arts options *12 approved options *15 from list below Recommended options include, but are not restricted to additional courses from above and the following: BIOCH 310, 320, 330; BIOL 391, 400, 490, 495, 498, 499, 545; BOT 303, 340, 350, 403, 445; CELL 300, 301, 402, 415; ENT 302, 321, 378; GENET 270, 301, 302, 304, 375, 390, 412, 418, 420; IMIN 200, 371, 372, 401, 452; MA SC 403, 415; MICRB 265, 311; NEURO 443, 472; PHYSL 372, 401, 402, 403, 404, 544, 545; PMCOL 371; ZOOL 340, 342, 343, 352, 370, 402, 441, 442, 452 Notes: (1) MA SC courses on this list are offered at Bamfield Marine Sciences Centre. (2) Honors students are required to take BIOL 499 and reduce approved options by *6. (3) The above program is distinct from the <i>Honors Physiology Program</i> offered by the Department of Physiology, Faculty of Medicine and Dentistry. Applicants should contact the current Advisor in the Department of Biological Sciences to ensure that this is the Program for which they wish to register.</p>

P r o p o s e d	No change	No change	<p>ZOOL 303, 325, 344 *3 from ZOOL 402, 441, 442 or BIOL 545 *3 from BIOCH 310, 320, 330 or CELL 300 *9 from ZOOL 340, 342, 343, 352 or BIOL 391 *9 Arts options *12 approved options *15 from list below</p> <p>Recommended options include, but are not restricted to additional courses from above and the following: BIOCH 310, 320, 330; BIOL 391, 400, 490, 495, 498, 499, 545; BOT 303, 340, 350, 403, 445; CELL 300, 301, 402, 415; ENT 302, 321, 378; GENET 270, 301, 302, 304, 375, 390, 412, 418, 420; IMIN 200, 371, 372, 401, 452; MA SC 403, 415; MICRB 265, 311; NEURO 443, 472; PHYSL 372, 401, 402, 403, 404, 544, 545; PMCOL 371; ZOOL 340, 342, 343, 352, 370, 402, 441, 442, 450, 452</p> <p>Notes: (1) MA SC courses on this list are offered at Bamfield Marine Sciences Centre. (2) Honors students are required to take BIOL 499 and reduce approved options by *6. (3) The above program is distinct from the <i>Honors Physiology Program</i> offered by the Department of Physiology, Faculty of Medicine and Dentistry. Applicants should contact the current Advisor in the Department of Biological Sciences to ensure that this is the Program for which they wish to register.</p>
--	-----------	-----------	---

**Immunology and Infection
Specialization
2010-2011 Calendar**

CURRENT

Year 1

BIOL 107, 108
CHEM 101, 102
CHEM 164 or 261
MATH 113 or 114 or 120
STAT 141 or 151
*3 Approved Option
*6 Arts options (English recommended)

Year 2

BIOCH 200
BIOL 201
BIOL 207, 208
CHEM 263
IMIN 200
MICRB 265
3 Approved Option (GENET 270 highly recommended)¹
*6 Arts options

Years 3 and 4

ZOOL 241 and 242 or PHYSL 210 or 211
One of: BIOCH 430; GENET 304; MICRB 316
IMIN 324, 371, 452
MMI 351
ZOOL 352
*6 Arts options
*9 from the List below²
*21 Approved Options from the List below or options approved by an advisor³
¹ GENET 270 is the prerequisite for: GENET 304, MICRB 316
² At least *3 must be ~~in a course with a laboratory component.~~
³ ~~Honors students must take BIOL 499 or MMI 499 and reduce Approved Options to *15.~~

List

BIOCH 320, 330, 430, 450
CELL 300
ENT 378
GENET 270, 304
IMIN 372, 401
MICRB 316
MMI 352, 405, 415, 426
ZOOL 354, 452

Note: Normally only *12 are allowed outside the Faculties of Science and Arts in the entire program. See §194 for courses outside the Faculty of Science that will be considered as Science options.

PROPOSED

Year 1

No change

Year 2

BIOCH 200

BIOL 201

BIOL 207, 208

CHEM 263

IMIN 200

MICRB 265

*3 Approved Option (GENET 270 highly recommended)¹

*6 Arts options

Years 3 and 4

ZOOL 241 and 242 or PHYSL 210 or 211

One of: BIOCH 430; GENET 304; MICRB 316

IMIN 324, 371, 452

MMI 351

ZOOL 352

*6 Arts options

*9 from the List below²

*21 Approved Options from the List below or options approved by an advisor

Honors students must take MMI 391 or BIOL 391 or IMIN 391 and BIOL 499 or MMI 499 and reduce Approved Options to *12.

¹ GENET 270 is the prerequisite for: GENET 304, MICRB 316

² At least *3 must be a laboratory course: BIOL 391, IMIN 372, MMI 352, 391, 426, ZOOL 452

List

BIOCH 320, 330, 430, 450

BIOL 391

CELL 300

ENT 378

GENET 270, 304

IMIN, 372, 391, 401, 405, 410

MICRB 316, 470

MMI 352, 391, 405, 415, 426, 427

ZOOL 354, 452

Note: Normally only *12 are allowed outside the Faculties of Science and Arts in the entire program. See §194 for courses outside the Faculty of Science that will be considered as Science options.