

Medical Laboratory Science

*2019-2020 - UG - Minor Program Adjustment

(A) Proposal summary

Home faculty*

Faculty of Health Sciences

Summary of proposed changes*

Introduce the option of HLSC 4996/4997 Research Applications (online section) as an option to replace MLSC 4400/4401 Theory & Project I & II for the practicum year. Enrolment in the course would be by Program Director and Practicum Coordinator approval only.

4th Year MLSC course changes to better align placement of the comprehensive exam and evaluation criteria

Please note MLSc calendar description related to practicum hours updated in the 2017-18 academic year but was not reflected in the Academic Calendar, this has been corrected in 2018-2019 through the editing process.

Is a new course associated with this proposal?*

Yes
 No

Are you modifying a pathways program?*

Yes
 No

Effective semester*

Fall 2019

Are you attaching any supporting documents?*

Yes No

(B) Program information

Program or shared core name* Medical Laboratory Science

Program type

Bachelor (Honours)

Degree type

Bachelor of Health Sciences (Honours)

Program or shared core description

Calendar copy*

General information

UOIT offers a Bachelor of Health Science (Honours) in Medical Laboratory Science. This degree is the first of its kind in Ontario and provides students with a unique academic pathway leading to a breadth of employment and graduate study opportunities. The Medical Laboratory Science program holds accreditation with Accreditation Canada.

The faculty's mission is to prepare highly skilled graduates who are committed to excellence, innovation, and evidence-based practice in a rapidly changing health care environment. Throughout the program there is an emphasis on collaboration, accountability, leadership and research as the foundation of evidence.

In recent years, modern health care has become increasingly dependent on complex laboratory tests. Medical laboratory technologists perform tests in all laboratory areas. The results of these tests aid in the diagnosis, monitoring and treatment of disease. Increasing consumer and physician demand for diagnostic laboratory services and the anticipated Ontario population growth of 18 per cent over the next 10 years are excellent indicators of continued and growing employment opportunities for Medical Laboratory Science graduates.

Students learn fundamental knowledge and skills in biological, physical and health sciences. In the medical laboratory science specific courses students develop strong laboratory, interpersonal, analytical and problem solving skills with consolidation of these skills occurring during the fourth year practicum.

When in the laboratories, students will work with all types of human specimens. It is important that applicants are aware of this aspect of the program. Throughout Years 1 to 4, students will be expected to collect blood specimens. Competence in blood collection must be demonstrated prior to entering the first practicum semester in Year 4.

Medical laboratory professionals are dedicated to serving the health care needs of the public; therefore, the welfare of the patient is paramount at all times. In order to meet this expectation on graduation, it is important that students considering Medical Laboratory Science realize there is an expectation throughout the program that they perform testing protocols within a pre-established time standard and meet the Canadian Society for Medical Laboratory

Science competencies so that they are prepared for the clinical environment.

Applicants with colour blindness should be aware that the ability to clearly differentiate colours is essential for working in a diagnostic medical laboratory.

Admission requirements

Admission is competitive. The specific average or standing required for admission varies from year to year. Students are selected by taking into consideration a wide range of criteria including school marks, distribution of subjects taken, and performance in subjects relevant to the academic program. Possession of the minimum requirements does not guarantee acceptance. Preference will be given to applicants with the best qualifications.

Current Ontario secondary students must complete the Ontario Secondary School Diploma (OSSD) with six 4U or 4M credits including English (ENG4U) with a minimum grade of 60 per cent, Biology (SBI4U) and Chemistry (SCH4U) and one of Advanced Functions (MHF4U) or Calculus and Vectors (MCV4U). In addition, a combined minimum 70 per cent average in math and science courses is required. All other applicants should refer to [admissions](#) for the requirements for their specific category of admission.

Practicum

Starting in first year, students will have the opportunity to apply their knowledge and get hands-on experience in the simulation laboratories. As the theoretical knowledge expands so does experiential knowledge. In fourth year, students will be placed in a diagnostic medical laboratory for the final two practicum semesters where they will work under the supervision of a medical laboratory technologist and perform increasingly complex procedures on human specimens. Clinical placements give students hands-on practice, experience in different work environments and the opportunity to network with potential employers. Although some exceptional circumstances may be considered, practicum sites are assigned on a random basis; therefore, students may be placed in any affiliated site within the province of Ontario. Students are responsible for any costs associated with relocation.

Program start dates

In order to accommodate practicum-related course requirements, fourth-year students in the Medical Laboratory Science program will have start dates prior to the first day of lectures that is stated in the [academic schedule](#). The fall term will begin on the Monday two weeks prior to the stated first week of lectures. The winter term start date will be the first date the university reopens in January. Students will be advised by the program administration of specific term dates prior to the start of their fourth year.

Course schedules

Practicum placements in the fourth year occur away from the UOIT campus in diagnostic medical laboratories across the province. Students should expect to attend their practicum placement five days per week, approximately eight hours each day. Students taking electives where classes are scheduled on the UOIT campus during their practicum hours must contact the Medical Laboratory Science practicum co-ordinator to make accommodations for their classes.

Exam accommodation

Practicum placements in the fourth year of the Medical Laboratory Science program are 30 weeks and will extend into the stated examination period for the university in each term. Students who are taking elective courses that have exams scheduled during practicum hours must contact the Medical Laboratory Science practicum co-ordinator to make accommodations for their exams.

Professional qualifications

Following successful completion of the degree program, graduates are eligible to write the examinations offered by the Canadian Society for Medical Laboratory Science (CSMLS) to obtain national certification. CSMLS certification is recognized throughout Canada. For those graduates that choose to remain in Ontario to practice, successful completion of the CSMLS examination allows graduates to register with the College of Medical Laboratory Technologists of Ontario (CMLTO), which governs license to practice in Ontario. Graduates are also eligible to write the American Society for Clinical Pathology examinations, which are a prerequisite for applying to work as a Medical Laboratory Technologist in the United States.

Program details and degree requirements

To be eligible for a Bachelor of Health Science (Honours) degree, students must successfully complete 120 credit hours. Degree and program requirements are subject to change without notice. The following program map is only a guide and is to be used in combination with proper advising. Students wishing to make changes to their program of study should consult their academic advisor.

Although reasonable efforts will be made to adhere to the following program map, course requirements and term offerings may change. For the most up-to-date list of course offerings, please visit the faculty website at healthsciences.uoit.ca.

Year 1

Semester 1 (15 credit hours)

[Before] Open elective

BIOL 1010U Biology I: Molecular and Cellular Systems

CHEM 1010U Chemistry I

HLSC 1200U Anatomy and Physiology I

HLSC 1701U Information Literacy and Written Communication for the Health Sciences

Semester 2 (15 credit hours)

[Before] Open elective

CHEM 1020U Chemistry II

HLSC 1201U Anatomy and Physiology II

HLSC 2110U Foundations in Clinical Biochemistry

MATH 1880U Mathematical Modelling for Health Science

Year 2

Semester 1 (15 credit hours)

CHEM 2130U Analytical Chemistry for Biosciences

HLSC 2460U Pathophysiology I

HLSC 3800U Critical Appraisal of Statistics in Health Science

MLSC 1010U Introduction to Medical Laboratory Practice

MLSC 2130U Foundations in Clinical Microbiology and Immunology

Semester 2 (15 credit hours)

HLSC 2461U Pathophysiology II

HLSC 3910U Research Methods for Health Care Professionals: Theory and Application

MLSC 2111U Clinical Biochemistry I

MLSC 2121U Clinical Hematology I

MLSC 2131U Clinical Microbiology I

Year 3

Semester 1 (15 credit hours)

MLSC 3111U Clinical Biochemistry II

MLSC 3121U Clinical Hematology II

MLSC 3131U Clinical Microbiology II

MLSC 3221U Transfusion Immunology and Hemostasis

MLSC 3230U Microanatomy and Histotechnology

Semester 2 (15 credit hours)

MLSC 3141U Molecular Techniques and Complementary Technologies
MLSC 3210U Effective Leadership and Quality Management in the Clinical Laboratory
MLSC 3220U Transfusion Science I
MLSC 3231U Advanced Histotechnology
MLSC 3300U Simulated Clinical Practicum

Year 4

Semester 1 (15 credit hours)

HLSC 4820U Interdisciplinary Collaboration
MLSC 4111U Clinical Biochemistry III
MLSC 4121U Clinical Hematology III
MLSC 4131U Clinical Microbiology III
MLSC 4210U Professional Practice in the Clinical Laboratory I
MLSC 4220U Transfusion Science II
MLSC 4231U Histopathology I
MLSC 4400U Clinical Theory and Project I

Semester 2 (15 credit hours)

[Before] Open elective

MLSC 4112U Clinical Biochemistry IV
MLSC 4122U Clinical Hematology IV
MLSC 4132U Clinical Microbiology IV
MLSC 4211U Professional Practice in the Clinical Laboratory II
MLSC 4221U Transfusion Science III
MLSC 4232U Histopathology II
MLSC 4401U Clinical Theory and Project II

[After]

Note: Program start dates for fourth-year students in the Medical Laboratory Science program begin prior to the stated first week of lectures for the university. Please view the academic schedule and the program start date section (above) for more information.

Program progression requirements

A student must achieve a minimum grade of C in all professional medical laboratory courses (MLSC) in order to pass the course. Students who earn a grade lower than a C in any of the courses designated MLSC will be put on program probation, regardless of their overall GPA. A second grade of less than C in any repeated MLSC designated course will result in an academic standing of Program Dismissal.

Also, a total of three failures in any combination of required HLSC or MLSC courses will result in an academic standing of Program Dismissal.

Additionally, students who have failed a third attempt of any required program course will be dismissed from the program as per the university's repeat policy.

Students who are dismissed from the program, but have maintained the academic standing to remain at the university, may apply for a change of program.

Program progression review

Students who have been dismissed from the program may, with sufficient grounds, request a Review of Academic Standing as outlined in UOIT's [academic regulations](#).

Program readmission

See [readmission of former UOIT students](#).

Program professional suitability

The safety of students, patients and faculty while in UOIT laboratories and placement settings is of paramount importance for the Medical Laboratory Science program and for the placement setting. The following requirements are in place to ensure the provision of competent, safe and ethical practice while students are registered in MLSC designated courses.

Requirements for safe practice

In order to be eligible to participate in MLSC designated courses students will be required to meet specific requirements for safe practice within established timelines as stated in the Medical Laboratory Science Program and Practicum Handbooks. These requirements include the successful completion of all prerequisite course work, health and safety requirements, and a criminal reference check. Students who do not successfully meet the requirements for safe practice will not be approved to participate in MLSC designated courses and will be required to withdraw from their respective courses until the next time the course is offered and the requirements are met.

Clinical review

A student on placement in a clinical setting, who has exhibited behaviour that is inconsistent with the norms and expectations of the profession, or that places the student, patients or others at risk, may be immediately suspended from the program and subject to a review and possible sanctions, in accordance with UOIT's [academic regulations](#).

Program learning
outcomes

(C) Pathways programs

Proposed transfer
credit block

(D) Detailed proposal information

Enhanced
academic
opportunities*

With implementation of the proposed changes, students will continue to gain all relevant knowledge and skill associated with academic writing and presentation skills fundamental to the Honours degree program. They will not experience any undue stress associated with taking HLSC 4996/4997 fully online with asynchronous online discussions during weeklong modules that will not negatively affect attendance in practicum.

Giving the clinical practicum sites the ability to opt out of the clinical project requirement will minimize their objections associated with resource challenges

as a barrier to securing clinical placement.

**Financial/
resource
implications***

The MLSc Practicum Coordinator will provide marking support for HLSC 4996/4997, if required.

**Enrolment
implications***

Additional enrollment of MLSc students in HLSC 4996/4997 will fluctuate annually and is somewhat unpredictable. Timely communication with clinical partner sites and identification of students requiring alternate project strategies will permit adequate time for planning and workload assessment.

Transition plan*

As this is option will only be used where a project cannot be identified for a student; the program director and/or practicum coordinator will arrange registration for the student in HLSC 4996/4997, instead of MLSC 4400/4401. This option will no be included on the program map or in the academic calendar.

**Additional
supporting
information, if
applicable**

(E) Impact and consultation

Does this change include any indigenous content? * Yes No

We have consulted with all impacted areas * Yes N/A

Consultation*

We have consulted extensively with the MLSc Program Advisory Committee and have received their full support for these changes.

We have consulted with the Dean (Lori Livingston), the Director of Health Sciences (Elita Partosoedarso), the HLSC 4996/4997 course instructor (Robert Balogh) and Manager, Planning & Operations (Sylvie Brosseau). There have been no significant barriers identified to date.

Medical Laboratory Science – Bridge – Advanced Diploma in Biotechnology

*2019-2020 - UG - Minor Program Adjustment

(A) Proposal summary

Home faculty*

Faculty of Health Sciences

Summary of proposed changes*

Introduce the option of HLSC 4996/4997 Research Applications (online section) as an option to replace MLSC 4400/4401 Theory & Project I & II for the practicum year. Enrolment in the course would be by Program Director and Practicum Coordinator approval only.

4th Year MLSC course changes to better align placement of the comprehensive exam and evaluation criteria

Please note MLSc calendar description related to practicum hours updated in the 2017-18 academic year but not reflected in the Academic Calendar

Is a new course associated with this proposal?*

Yes

No

Are you modifying a pathways program?*

Yes

No

Effective semester*

Fall 2019

Are you attaching any supporting documents?*

Yes No

(B) Program information

Program or shared core name*

Medical Laboratory Science – Bridge – Advanced Diploma in Biotechnology

Program type

Bridge

Degree type

College-to-University Transfer

Program or
shared core
description

Calendar copy*

General information

UOIT's Medical Laboratory Science Bridge program recognizes the significant and complementary technical skills of the three-year Biotechnology diploma by providing the opportunity for Durham and Fleming College graduates to apply this diploma toward a Bachelor of Health Sciences in Medical Laboratory Science.

Admission requirements

Due to the limited number of Year 2 seats available and the established relationships, this pathway will only be available to graduates of the Durham and Fleming College advanced diploma in Biotechnology. Candidates from these two colleges will apply directly to UOIT.

Candidates are required to provide documentation of successful completion of an advanced diploma in Biotechnology from Durham or Fleming College with an overall GPA of 3 (73-76 per cent) or greater. Candidates must also provide documentation of successful completion of an approved comprehensive human anatomy and physiology course(s). Candidates that have completed a comprehensive human anatomy and physiology courses(s) that is not on the approved list (see below) may apply for transfer credit at UOIT by submitting documentation of successful completion along with the appropriate course outline(s).

Approved Anatomy and Physiology courses

The courses listed below have been reviewed by the faculty and are deemed to be suitable prerequisites for the Medical Laboratory Science Bridge program.

Durham College

**ANAT1500; or
BIO1581 and BIO2582; or
BIO1502 and BIO2502**

Fleming College

NRSG163 and NRSG167

Michener Institute

AP807

Mohawk College

HSCI100027

Trent University

BIOL 1050H and BIOL 1051H

University of Ontario Institute of Technology

HLSC 2202U

Practicum

Starting in second year, students will have the opportunity to apply their knowledge and get hands-on experience in the simulation laboratories. As the theoretical knowledge expands so does experiential knowledge. In fourth year, students will be placed in a diagnostic medical laboratory for the final two practicum semesters where they will work under the supervision of a medical laboratory technologist and perform increasingly complex procedures on human specimens.

Clinical placements give students hands-on practice, experience in different work environments and the opportunity to network with potential employers. Although some exceptional circumstances may be considered, practicum sites are assigned on a random basis; therefore, students may be placed in any affiliated site within the province of Ontario. Students are responsible for any costs associated with relocation.

Program start dates

In order to accommodate practicum-related course requirements, fourth-year students in the Medical Laboratory Science program will have start dates prior to the first day of lectures that is stated in the [academic schedule](#). The fall term will begin on the Monday two weeks prior to the stated first week of lectures. The winter term start date will be the first date the university reopens in January. Students will be advised by the program administration of specific term dates prior to the start of their fourth year.

Course schedules

Practicum placements in the fourth year occur away from the UOIT campus in diagnostic medical laboratories across the province. Students should expect to attend their practicum placement five days per week, approximately eight hours each day. Students taking electives where classes are scheduled on the UOIT campus during their practicum hours must contact the Medical Laboratory Science practicum co-ordinator to make accommodations for their classes.

Exam accommodation

Practicum placements in the fourth year of the Medical Laboratory Science program are 30 weeks and will extend into the stated examination period for the university in each term. Students who are taking elective courses that have exams scheduled during practicum hours must contact the Medical Laboratory Science practicum co-ordinator to make accommodations for their exams.

Professional qualifications

Following successful completion of the degree program, graduates are eligible to write the examinations offered by the Canadian Society for Medical Laboratory Science (CSMLS) to obtain national certification. CSMLS certification is recognized throughout Canada. For those graduates that choose to remain in Ontario to practice, successful completion of the CSMLS examination allows graduates to register with the College of Medical Laboratory Technologists of Ontario (CMLTO), which governs license to practice in Ontario. Graduates are also eligible to write the American Society for Clinical Pathology examinations, which are a prerequisite for applying to work as a Medical Laboratory Technologist in the United States.

Program details and degree requirements

To be eligible for a Bachelor of Health Science (Honours) degree, students must successfully complete 120 credit hours through credit transfer or completion of courses. Degree and program requirements are subject to change without notice. The following program map is only a guide and is to be used in combination with proper advising.

Students wishing to make changes to their program of study should consult their academic advisor.

Although reasonable efforts will be made to adhere to the following program map, course requirements and term offerings may change. For the most up-to-date list of course offerings, please visit the faculty website at healthsciences.uoit.ca.

Successful candidates enter the program at Year 2, fall semester and follow the program map identified below:

Year 2

Semester 1 (15 credit hours)

[Before] Open elective

HLSC 2460U Pathophysiology I

HLSC 3800U Critical Appraisal of Statistics in Health Science

MLSC 1010U Introduction to Medical Laboratory Practice

MLSC 2140U Medical Laboratory Science (MLS) Bridge Course – Biotechnology to MLS

Semester 2 (15 credit hours)

HLSC 2461U Pathophysiology II

HLSC 3910U Research Methods for Health Care Professionals: Theory and Application

MLSC 2111U Clinical Biochemistry I

MLSC 2121U Clinical Hematology I

MLSC 2131U Clinical Microbiology I

Year 3

Semester 1 (15 credit hours)

MLSC 3111U Clinical Biochemistry II
MLSC 3121U Clinical Hematology II
MLSC 3131U Clinical Microbiology II
MLSC 3221U Transfusion Immunology and Hemostasis
MLSC 3230U Microanatomy and Histotechnology

Semester 2 (12 credit hours)

MLSC 3210U Effective Leadership and Quality Management in the Clinical Laboratory
MLSC 3220U Transfusion Science I
MLSC 3231U Advanced Histotechnology
MLSC 3300U Simulated Clinical Practicum

Year 4

Semester 1 (15 credit hours)

HLSC 4820U Interdisciplinary Collaboration
MLSC 4111U Clinical Biochemistry III
MLSC 4121U Clinical Hematology III
MLSC 4131U Clinical Microbiology III
MLSC 4210U Professional Practice in the Clinical Laboratory I
MLSC 4220U Transfusion Science II
MLSC 4231U Histopathology I
MLSC 4400U Clinical Theory and Project I

Semester 2 (15 credit hours)

MLSC 4112U Clinical Biochemistry IV
MLSC 4122U Clinical Hematology IV
MLSC 4132U Clinical Microbiology IV

MLSC 4211U Professional Practice in the Clinical Laboratory II

MLSC 4221U Transfusion Science III

MLSC 4232U Histopathology II

MLSC 4401U Clinical Theory and Project II

Program progression requirements

A student must achieve a minimum grade of C in all professional medical laboratory courses (MLSC) in order to pass the course. Students who earn a grade lower than a C in any of the courses designated MLSC will be put on program probation, regardless of their overall GPA. A second grade of less than C in any repeated MLSC designated course will result in an academic standing of Program Dismissal.

Also, a total of three failures in any combination of required HLSC or MLSC courses will result in an academic standing of Program Dismissal.

Additionally, students who have failed a third attempt of any required program course will be dismissed from the program as per the university's repeat policy.

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Program readmission

See [readmission of former UOIT students](#).

Program professional suitability

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Clinical review

A student on placement in a clinical setting, who has exhibited behaviour that is inconsistent with the norms and expectations of the profession, or that places the student, patients or others at risk, may be immediately suspended from the program and subject to a review and possible sanctions, in accordance with UOIT's [academic regulations](#).

Program learning
outcomes

(C) Pathways programs

Proposed transfer
credit block

(D) Detailed proposal information

Enhanced academic opportunities* With implementation of the proposed changes, students will continue to gain all relevant knowledge and skill associated with academic writing and presentation skills fundamental to the Honours degree program. They will not experience any undue stress associated with taking HLSC 4996/4997 fully online with asynchronous online discussions during weeklong modules that will not negatively affect attendance in practicum.

Giving the clinical practicum sites the ability to opt out of the clinical project requirement will minimize their objections associated with resource challenges as a barrier to securing clinical placement.

Financial/resource implications* The MLSc Practicum Coordinator will provide marking support for HLSC 4996/4997, if required.

Enrolment implications* Additional enrollment of MLSc students in HLSC 4996/4997 will fluctuate annually and is somewhat unpredictable. Timely communication with clinical partner sites and identification of students requiring alternate project strategies will permit adequate time for planning and workload assessment.

Transition plan* As this is option will only be used where a project cannot be identified for a student; the program director and/or practicum coordinator will arrange registration for the student in HLSC 4996/4997, instead of MLSC 4400/4401. This option will no be included on the program map or in the academic calendar.

Additional supporting information, if applicable

(E) Impact and consultation

Does this change include any indigenous content?* Yes No

We have consulted with all impacted areas* Yes N/A

Consultation* We have consulted extensively with the MLSc Program Advisory Committee and have received their full support for these changes.

We have consulted with the Dean (Lori Livingston), the Director of Health Sciences (Elita Partosoedarso), the HLSC 4996/4997 course instructor (Robert Balogh) and Manager, Planning & Operations (Sylvie Brosseau). There have been no significant barriers identified to date.

MLSC - 4210U - Professional Practice in the Clinical Laboratory I

*2019-2020 - UG - Course Change

(A) Proposal summary

Home faculty*

Faculty of Health Sciences

Course changes*

- Contact hours
- Co-requisite(s)
- Course description
- Course instructional method
- Course number or course subject code
- Course title
- Credit restriction(s) and/or equivalencies
- Credit weighting
- Cross-listing(s)
- Grade mode
- Learning outcomes
- Prerequisite(s)
- Remove course from academic calendar
- Teaching and assessment methods
- Other

Other changes

Reason for change and ways in which it maintains/enhance course/program objectives*

Currently students must complete a comprehensive multidisciplinary exam written at the conclusion of practicum. This comprehensive exam is being removed as an evaluation component from MLSC 4401 and added to evaluation criteria associated with MLSC 4211 Professional Practice in the Clinical Laboratory II. This course will change from a pass/fail grading scheme to a letter grade. Since MLSC 4211U is a continuation from MLSC 4210U, the grade mode will need to change in MLSC 4210U.

Financial implications* None

Effective semester* Fall 2019

Are you attaching any supporting documents?* Yes No

Additional supporting information, if applicable

(B) Course information

Course subject code* MLSC

Course number* 4210U

Course title (long form)* Professional Practice in the Clinical Laboratory I

Course title (short form)

Subject area Medical Laboratory Science

Course description Professional conduct is an essential component of the practice of Medical Laboratory Science. The behaviours associated with professional conduct are outlined in the national competency profile of the Canadian Society for Medical Laboratory Science (CSMLS), which form the basis of the behaviour expectations in this course. The goal is for students to consistently meet, by the end of the practicum, the entry to practice standards as stated in the CSMLS Code of Professional Conduct and the Code of Ethics of the College of Medical Laboratory Technologists of Ontario. Students registered in MLSC 4210U must register in MLSC 4211U. ~~Students must also participate in a national certification examination review seminar and successfully complete a comprehensive theory examination.~~

Credit hours 1.5

Lecture hours

Lab hours

Tutorial hours

Other hours

Cross-listing(s)

Prerequisite(s) MLSC 3300U

Prerequisite(s)
(for Banner)

Corequisite(s) MLSC 4400U

Prerequisite(s)
with concurrency

Credit
restriction(s)

Is the credit
restriction an
equivalent
course?

Recommended

Course
restrictions

Course type Core Elective

Is the course
undergraduate or
professional? Undergraduate Professional

Grade mode

(normal alpha grades) P (pass/fail grade)

CLS (in-class
delivery) Yes No

HYB (in-class and
online delivery) Yes No

IND (individual
studies) Yes No

OFF (off-site) Yes No

WB1 (virtual
meet time -
synchronous) Yes No

WEB (fully online
- asynchronous) Yes No

N/A (not
applicable) Yes No

Teaching and
assessment
methods

Course learning
outcomes

Apply critical thinking to constructively investigate, evaluate and problem solve.

Interacts using effective communication, teamwork skills and interprofessional collaboration with patients/clients and other health care professionals.

Meets the legal and ethical requirements of practice and protects the patient's right to a reasonable standard of care. Professional responsibility encompasses scope of practice, accountability, and professional development.

(C) Impact and consultation

Does this course contain any indigenous content? * Yes No

We have consulted with all impacted areas * Yes N/A

Consultation * Program level

(D) Routing

Faculty or program-level group *

MLSC - 4211U - Professional Practice in the Clinical Laboratory II

*2019-2020 - UG - Course Change

(A) Proposal summary

Home faculty*

Faculty of Health Sciences

Course changes*

- Contact hours
- Co-requisite(s)
- Course description
- Course instructional method
- Course number or course subject code
- Course title
- Credit restriction(s) and/or equivalencies
- Credit weighting
- Cross-listing(s)
- Grade mode
- Learning outcomes
- Prerequisite(s)
- Remove course from academic calendar
- Teaching and assessment methods
- Other

Other changes

Reason for change and ways in which it maintains/enhance course/program objectives*

Currently students must complete a comprehensive multidisciplinary exam written at the conclusion of practicum. This comprehensive exam is being removed as an evaluation component from MLSC 4401 and added to evaluation criteria associated with MLSC 4211 Professional Practice in the Clinical Laboratory II. This course will change from a pass/fail grading scheme to a letter grade.

Teaching & Assessments:

~~Completion of five professional conduct evaluation forms, with a green rating on all skills by the end of practicum i. e. one/discipline. A minimum of 5 story Wall entries, 1 per discipline, by the end of practicum. A minimum of 60% attendance at the Adobe Connect sessions Completion of a discipline-specific reflective journal within 2 weeks of the completion of each discipline. Comprehensive Exam (minimum of 70%)~~

Financial implications* None

Effective semester* Fall 2019

Are you attaching any supporting documents?* Yes No

Additional supporting information, if applicable

(B) Course information

Course subject code* MLSC

Course number* 4211U

Course title (long form)* Professional Practice in the Clinical Laboratory II

Course title (short form)

Subject area Medical Laboratory Science

Course description This course is a continuation of [MLSC 4210U](#). Students are expected to take this course immediately after [MLSC 4210U](#). **Students must also participate in a national certification examination review seminar and successfully complete a comprehensive theory examination.**

Credit hours 1.5

Lecture hours

Lab hours

Tutorial hours

Other hours

Cross-listing(s)

Prerequisite(s) [MLSC 4210U](#)

Prerequisite(s) (for Banner)

Corequisite(s) [MLSC 4401U](#)

Prerequisite(s) with concurrency

Credit restriction(s)

Is the credit restriction an equivalent course?

Recommended

Course restrictions

Course type Core Elective

Is the course undergraduate or professional? Undergraduate Professional

Grade mode

Activity Log

Michelle Sutcliffe

+ N (normal alpha grades)

- ~~N (normal alpha grades)~~

- ~~P (pass/fail grade)~~

Michelle Sutcliffe

+ P (pass/fail grade)

- ~~N (normal alpha grades)~~

N (normal alpha grades) P (pass/fail grade)

CLS (in-class delivery) Yes No

HYB (in-class and online delivery) Yes No

IND (individual studies) Yes No

OFF (off-site) Yes No

WB1 (virtual meet time - synchronous) Yes No

WEB (fully online - asynchronous) Yes No

N/A (not applicable) Yes No

Teaching and assessment methods

Teaching & Assessments:

Completion of five professional conduct evaluation forms, with a green rating on all skills by the end of practicum i. e. one/discipline.

A minimum of 5 story Wall entries, 1 per discipline, by the end of practicum.

A minimum of 60% attendance at the Adobe Connect sessions

Completion of a discipline-specific reflective journal within 2 weeks of the completion of each discipline.

Comprehensive Exam (minimum of 70%)

Course learning outcomes

Apply critical thinking to constructively investigate, evaluate and problem solve.

Interacts using effective communication, teamwork skills and interprofessional collaboration with patients/clients and other health care professionals.

Meets the legal and ethical requirements of practice and protects the patient's right to a reasonable standard of care. Professional responsibility encompasses scope of practice, accountability, and professional development.

(C) Impact and consultation

Does this course contain any indigenous content?*

Yes No

We have consulted with all impacted areas*

Yes N/A

Consultation* Program level

(D) Routing

Faculty or program-level group*

Medical Laboratory Science

MLSC - 4400U - Clinical Project I

*2019-2020 - UG - Course Change

(A) Proposal summary

Home faculty*

Faculty of Health Sciences

Course changes*

- Contact hours
- Co-requisite(s)
- Course description
- Course instructional method
- Course number or course subject code
- Course title
- Credit restriction(s) and/or equivalencies
- Credit weighting
- Cross-listing(s)
- Grade mode
- Learning outcomes
- Prerequisite(s)
- Remove course from academic calendar
- Teaching and assessment methods
- Other

Other changes

Reason for change and ways in which it maintains/enhances course/program objectives*

Currently students must complete a comprehensive multidisciplinary exam written at the conclusion of practicum. This comprehensive exam is being removed as an evaluation component from MLSC 4401 and added to evaluation criteria associated with MLSC 4211 Professional Practice in the Clinical Laboratory II. As a result, MLSC 4401U will have its name changed to show the removal of the exam. The new title for MLSC 4401U will be Clinical Project II. MLSC 4401U is a continuation of MLSC 4400U. The title for MLSC 4400U must change as well.

Financial implications* none

Effective semester* Fall 2019

Are you attaching any supporting documents?* Yes No

Additional supporting information, if applicable

(B) Course information

Course subject code* MLSC

Course number* 4400U

Course title (long form)* Clinical ~~Theory and~~ Project I

Course title (short form) Clinical ~~Theory and~~ Project I

Subject area Medical Laboratory Science

Course description The first half of this two-semester course presents the opportunity for students to complete an extensive literature review related to a current topic in health care. Students also work with their clinical coordinator and clinical project mentor to establish the topic and methodology to be used to complete the clinical project in the second semester course, [MLSC 4401U](#). Students registered in this course must register in [MLSC 4401U](#) to receive a grade.

Credit hours 3

Lecture hours

Lab hours

Tutorial hours

Other hours

Cross-listing(s)

Prerequisite(s) [HLSC 3910U](#)

Prerequisite(s) (for Banner)

Corequisite(s) MLSC 4111U, MLSC 4121U, MLSC 4131U, MLSC 4210U, MLSC 4220U, MLSC 4231U

Prerequisite(s)
with concurrency

Credit
restriction(s)

Is the credit
restriction an
equivalent
course?

Recommended

Course
restrictions

Course type Core Elective

Is the course
undergraduate or
professional? Undergraduate Professional

Grade mode N (normal alpha grades) P (pass/fail grade)

CLS (in-class
delivery) Yes No

HYB (in-class and
online delivery) Yes No

IND (individual
studies) Yes No

OFF (off-site) Yes No

WB1 (virtual
meet time -
synchronous) Yes No

WEB (fully online
- asynchronous) Yes No

N/A (not
applicable) Yes No

Teaching and
assessment
methods

Course learning
outcomes

Conducts professional practice according to established protocols, safety guidelines, and existing legislation.

Verifies relevant specimen data and ensure that appropriate specimens are collected and handled according to established protocols.

Demonstrates knowledge of the principles, performs analytical techniques, and assesses results on a variety of clinical microbiology specimens.

Uses scientific knowledge and skills to interpret, document and report laboratory results according to established protocols Practices and promotes the principles of quality management Apply critical thinking to constructively investigate, evaluate and problem solve.

Interacts using effective communication, teamwork skills and interprofessional collaboration with patients/clients and other health care professionals.

Meets the legal and ethical requirements of practice and protects the patient's right to a reasonable standard of care. Professional responsibility encompasses scope of practice, accountability, and professional development.

(C) Impact and consultation

Does this course contain any indigenous content? * Yes No

We have consulted with all impacted areas * Yes N/A

Consultation * Program level

(D) Routing

Faculty or program-level group *

MLSC - 4401U - Clinical Project II

*2019-2020 - UG - Course Change

(A) Proposal summary

Home faculty*

Faculty of Health Sciences

Course changes*

- Contact hours
- Co-requisite(s)
- Course description
- Course instructional method
- Course number or course subject code
- Course title
- Credit restriction(s) and/or equivalencies
- Credit weighting
- Cross-listing(s)
- Grade mode
- Learning outcomes
- Prerequisite(s)
- Remove course from academic calendar
- Teaching and assessment methods
- Other

Other changes

Reason for change and ways in which it maintains/enhance course/program objectives*

A name change for the course reflects the removal of the theory exam from this course.

Financial implications*

None

Effective semester*

Fall 2019

Are you attaching any supporting documents?*

Yes No

Additional supporting

information, if applicable

(B) Course information

Course subject code* **MLSC**

Course number* 4401U

Course title (long form)* Clinical ~~Theory and~~ Project II

Course title (short form) Clinical ~~Theory and~~ Project II

Subject area **Medical Laboratory Science**

Course description This is a continuation of MLSC 4400U. Students work with their clinical project mentor to complete the project, create a poster and participate in opportunities to present their work. Students ~~must also participate in a national certification examination review seminar and successfully complete a comprehensive theory examination.~~ Students are expected to take this course immediately after MLSC 4400U.

Credit hours 3

Lecture hours

Lab hours

Tutorial hours

Other hours

Cross-listing(s)

Prerequisite(s) MLSC 4400U

Prerequisite(s) (for Banner)

Corequisite(s) MLSC 4112U, MLSC 4122U, MLSC 4132U, MLSC 4211U, MLSC 4221U, MLSC 4232U

Prerequisite(s) with concurrency

Credit restriction(s)

Is the credit restriction an equivalent course?

Recommended

Course restrictions

Course type Core Elective

Is the course undergraduate or professional? Undergraduate Professional

Grade mode N (normal alpha grades) P (pass/fail grade)

CLS (in-class delivery) Yes No

HYB (in-class and online delivery) Yes No

IND (individual studies) Yes No

OFF (off-site) Yes No

WB1 (virtual meet time - synchronous) Yes No

WEB (fully online - asynchronous) Yes No

N/A (not applicable) Yes No

Teaching and assessment methods

Teaching & Assessment Changes:

Clinical Project:

- Literature review paper/peer review
- Introductory Assignment (5%)
- Journal (5%) • Paper (15%)
- Final Presentation/Poster (10%)
- Poster presentation (10%) 60%

Comprehensive Exam is now removed from MLSC 4401U

Course learning outcomes

Conducts professional practice according to established protocols, safety guidelines, and existing legislation.

Verifies relevant specimen data and ensure that appropriate specimens are collected and handled according to established protocols.

Demonstrates knowledge of the principles, performs analytical techniques, and assesses results on a variety of clinical microbiology specimens.

Uses scientific knowledge and skills to interpret, document and report laboratory results according to established protocols

Practices and promotes the principles of quality management
Apply critical thinking to constructively investigate, evaluate
and problem solve.

Interacts using effective communication, teamwork skills and
interprofessional collaboration with patients/clients and other
health care professionals.

Meets the legal and ethical requirements of practice and protects
the patient's right to a reasonable standard of care. Professional
responsibility encompasses scope of practice, accountability, and
professional development.

(C) Impact and consultation

Does this course contain any indigenous content? * Yes No

We have consulted with all impacted areas * Yes N/A

Consultation * Program level

(D) Routing

Faculty or program-level group *