COURSE CHANGE FORM

Complete 1a – 1f & 2a – 2c. Fill out the remainder of the form as applicable for items being changed.

1. General Information.

a. Submitted by the College of: College of Health Sciences | Today's Date: 9/20/10

b. Department/Division: Department of Clinical Sciences/Clinical Laboratory Sciences

c. Is there a change in "ownership" of the course? YES ☐ NO ☒

If YES, what college/department will offer the course instead? ____

d. What type of change is being proposed? ☒ Major ☐ Minor[1] (place cursor here for minor change definition)

e. Contact Person Name: Michelle Butina | Email: mbu228@uky.edu | Phone: 218-0852

f. Requested Effective Date: ☐ Semester Following Approval OR ☒ Specific Term[2]: Fall 2011

2. Designation and Description of Proposed Course.

a. **Current Prefix and Number:** CLS 881 | *Proposed Prefix & Number:* *MLS 483*

b. **Full Title:** Immunohematology Practicum | *Proposed Title:* *Immunohematology Practicum*

c. **Current Transcript Title** (if full title is more than 40 characters): ____

c. Proposed Transcript Title (if full title is more than 40 characters): ____

d. **Current Cross-listing:** ☒ N/A OR Currently[3] Cross-listed with (Prefix & Number): ____

Proposed – ☐ *ADD[3] Cross-listing (Prefix & Number):* ____

Proposed – ☐ *REMOVE[3,4] Cross-listing (Prefix & Number):* ____

e. **Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours[5] for each meeting pattern type.**

Current:	____ Lecture	____ Laboratory[5]	____ Recitation	____ Discussion	____ Indep. Study
	____ Clinical	____ Colloquium	1-5 Practicum	____ Research	____ Residency
	____ Seminar	____ Studio	____ Other – Please explain:	____	
Proposed:	____ *Lecture*	____ *Laboratory*	____ *Recitation*	____ *Discussion*	____ *Indep. Study*
	____ *Clinical*	____ *Colloquium*	*1-4 Practicum*	____ *Research*	____ *Residency*
	____ *Seminar*	____ *Studio*	____ *Other – Please explain:*	____	

f. **Current Grading System:** ☐ Letter (A, B, C, etc.) ☒ Pass/Fail

Proposed Grading System: ☐ *Letter (A, B, C, etc.)* ☒ *Pass/Fail*

g. **Current number of credit hours:** 1-5 | *Proposed number of credit hours:* *1-4*

h. **Currently, is this course repeatable for additional credit?** YES ☐ NO ☒

Comment [OSC1]: Excerpt from *SR 3.3.0.G.2* **Definition.** A request may be considered a minor change if it meets one of the following criteria:
a. change in number within the same hundred series*;
b. editorial change in the course title or description which does not imply change in content or emphasis;
c. a change in prerequisite(s) which does not imply change in content or emphasis, or which is made necessary by the elimination or significant alteration of the prerequisite(s); d. a cross-listing of a course under conditions set forth in *SR 3.3.0.E*;
e. correction of typographical errors.

*...for the specific purposes of the minor exception rule, the 600-799 courses are the same "hundred series," as long as the other minor change requirements are complied with. [RC 1/15/09]

[1] See comment description regarding minor course change. *Minor changes are sent directly from dean's office to Senate Council Chair.* If Chair deems the change as "not minor," the form will be sent to appropriate academic Council for normal processing and contact person is informed.
[2] Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.
[3] Signature of the chair of the cross-listing department is required on the Signature Routing Log.
[4] Removing a cross-listing does not drop the other course – it merely unlinks the two courses.
[5] Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting. Lab meeting generally represents at least two hrs per wk for a semester for 1 credit hour. (See *SR 5.2.1.*)

COURSE CHANGE FORM

	Proposed to be repeatable for additional credit?	*YES* ☐	*NO* ☒
	If YES: *Maximum number of credit hours:*	_____	
	If YES: *Will this course allow multiple registrations during the same semester?*	*YES* ☐	*NO* ☐
i.	**Current Course Description for Bulletin:**	A supervised practicum in which the student integrates theory and practice of immunohematology in a clinical setting. Offered on a Pass/Fail basis only. Laboratory, 35-40 hours per week. The number of credits will depend on the student's prior experience.	
	Proposed Course Description for Bulletin:	*This course consists of a supervised practicum in which students will integrate practice and theory of immunohematology (blood bank) in a health care setting and expose them to the scope of work, variety of tests, and automation found within the immunohematology department. Laboratory, 35-40 hours per week. The number of credits will depend on the student's prior experience.*	
j.	**Current Prerequisites, if any:**	Admission into the Clinical Laboratory Sciences Program and CLS 848 (may be taken concurrently).	
	Proposed Prerequisites, if any:	*Successful completion of MLS 463 and MLS 463L.*	
k.	Current Distance Learning(DL) Status:	☐ N/A	☐ Already approved for DL* ☒ *Please Add*[6] ☐ *Please Drop*
	*If already approved for DL, the Distance Learning Form must also be submitted unless the department affirms (by checking this box ☐) that the proposed changes do not affect DL delivery.		
l.	**Current Supplementary Teaching Component, if any:**	☐ Community-Based Experience	☐ Service Learning ☐ Both
	Proposed Supplementary Teaching Component:	☐ *Community-Based Experience*	☐ *Service Learning* ☐ *Both*
3.	**Currently, is this course taught off campus?**	YES ☒	NO ☐
	Proposed to be taught off campus?	YES ☒	NO ☐
4.	**Are significant changes in content/teaching objectives of the course being proposed?**	YES ☐	NO ☒
	If YES, explain and offer brief rationale:		
	_____		
5.	**Course Relationship to Program(s).**		
a.	**Are there other depts and/or pgms that could be affected by the proposed change?**	YES ☐	NO ☒
	If YES, identify the depts. and/or pgms: _____		
b.	**Will modifying this course result in a new requirement[7] for ANY program?**	YES ☒	NO ☐
	If YES[7], list the program(s) here:	*Medical Laboratory Science*	
6.	**Information to be Placed on Syllabus.**		
a.	☐ Check box if changed to 400G or 500.	If changed to 400G- or 500-level course you must send in a syllabus and *you must include the differentiation* between undergraduate and graduate students by: (i) requiring additional assignments by the graduate students; and/or (ii) establishing different grading criteria in the course for graduate students. (See *SR 3.1.4.*)	

[6] You must *also* submit the Distance Learning Form in order for the course to be considered for DL delivery.
[7] In order to change a program, a program change form must also be submitted.

COURSE CHANGE FORM

Signature Routing Log

General Information:

Course Prefix and Number: CLS 881 (Proposed MLS 483)

Proposal Contact Person Name: Michelle Butina Phone: 218-0852 Email: mbu228@uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
CLS Faculty	9/20/10	Dr. Michelle Butina / 218-0852 / mbu228@uky.edu	Michelle Butina
Clinical Sciences Department	9/20/10	Dr. Karen Skaff / 218-0585 / karenskaff@uky.edu	
CHS Associate Dean for Academic Affairs	10/26/10	Dr. Sharon Stewart / 218-0570 / srstew01@email.uky.edu	Sharon Stewart
		/ /	
		/ /	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision[8]
Undergraduate Council	3/1/2011	Sharon Gill	
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

[8] Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

University of Kentucky
College of Health Sciences
Department of Clinical Sciences
Clinical Laboratory Sciences

Course Number/Title/Section:	MLS 483 Immunohematology Practicum, Section TBD
Course Credit:	1-4 credits
Course Time /Place:	Time: Schedule set by clinical affiliate Place: Assigned clinical affiliate
Course Faculty:	(1) Linda Gorman, PhD, MLS(ASCP) Clinical Coordinator 126G CTW Bldg. 900 S. Limestone Lexington, KY 40536-0200 Email (preferred for contacting instructor): lsgorm0@uky.edu Office phone: (859) 218-0855 (2) Clinical faculty located at clinical affiliate (3) Michelle Butina, PhD, MLS(ASCP) Program Director 124D CTW Bldg. 900 S. Limestone Lexington, KY 40536-0200 Email (preferred for contacting instructor): Michelle.Butina@uky.edu Office phone: (859) 218-0852

COURSE DESCRIPTION

Bulletin Description:
This course consists of a supervised practicum in which students will integrate practice and theory of immunohematology (blood bank) in a health care setting and expose them to the scope of work, variety of tests, and automation found within the immunohematology department. Laboratory, 35-40 hours per week. The number of credits will depend on the student's prior experience. Prereq: Successful completion of MLS 463 and MLS 463L.

Overview:
The clinical practicum for Immunohematology is 5 weeks in length. The practicum has a standardized checklist that must be completed by every student. Practicum times will vary depending on the affiliate, but should be about 8 hours per day in length. This will allow the student time to review and correlate didactic material with the clinical experience on a daily

basis.

Student Learning Outcomes:
Upon completing this practicum, students will be able to demonstrate the following learning outcomes:

1. Evaluate patient specimens for acceptability of testing.
2. Correlate laboratory tests with disease states.
3. Interpret patient test results and identify any inconsistent values.
4. Perform testing using the methods provided by the clinical affiliate.
5. Demonstrate proper use of immunohematology instrumentation and/or automation.
6. Discuss scientific principles and test methodologies of any immunohematology laboratory testing performed.
7. Monitor and evaluate quality control data.
8. Follow lab safety precautions/protocols established by the clinical affiliate.
9. Use medical terminology and abbreviations in the proper context.
10. Professionally communicate with fellow health care professionals.
11. Develop and demonstrate professional attitudes, behaviors, and practice.

Objectives:
The objective of this practicum is to impart to students:

1. The ability to interpret clinical results and apply trouble-shooting skills while practicing self-validation of their findings.
2. The ability to effectively communicate their findings with peers and other healthcare professionals, underscoring this with respect for patient confidentiality at all times.
3. A thorough understanding of quality control and quality assurance relative to all test results and interpretation of findings.

Course Materials:
For Immunohematology Practicum the student will be required to print the Affective Performance evaluation form, Technical Performance evaluation form and Student Checklist as needed throughout the clinical rotations. Copies of these forms are available on Blackboard.

Evaluation Criteria:
Evaluation is based upon:

1. Affective Performance: Clinical faculty will evaluate affective performance. See the Affective Performance Evaluation in the MLS Student Handbook.
2. Technical Performance: Clinical faculty will evaluate technical performance. See the Technical Performance Evaluation in the MLS Student Handbook.
3. Knowledge: By the end of the practicum for each discipline, the student will be able to demonstrate completion of the objectives that are listed for the practicum. Students will be evaluated by clinical faculty and the clinical coordinator. See Immunohematology student checklist below. (Also located in the MLS Student Handbook.)
4. Attendance: See course policy below.
5. Writing Assignments: Students are required to complete 3 written assignments by the end of the Immunohematology practicum.

Assignments
During the Immunohematology Practicum the student is required to write a 1-3 page paper on each of the following:

1. Piece of automated equipment used in that lab (including daily QC and monthly QC)
2. Something that you found interesting about your rotation; or identify a problem area and suggest ways to prevent the problem
3. A write-up of a specific case that occurred during your rotation

Assignments, with detailed instructions, will be available on Blackboard. All assignments are to be accessed and submitted via Blackboard. These assignments will be due to the clinical coordinator no later than the last scheduled day of practicum.

Grading:
MLS 483 is evaluated as **Pass or Fail:**

Pass: Student must successfully complete all of the following:

1. A minimum of 70% of Affective Performance items (**starred items must be demonstrated at all times**).
2. A minimum of 70% of Technical Performance items.
3. At least 95% successful completion of all required checklist items. Checklists must be delivered to the clinical coordinator no later than the Friday immediately following the final day of the practicum.
4. Satisfactory attendance record (present for 95% of scheduled rotation days with completion of all required make-up days for absences.)
5. Completion of 3 reports for each practicum which must be submitted no later than the final rotation day of Immunohematology.

Fail:

1. Student completes less than 70% of affective or technical performance items; or fails to complete a starred affective performance item.
2. Failure to adhere to attendance guidelines (more than **2** unexcused absences).
3. Any student who is asked to leave a clinical site prior to completion of the assigned rotation time will automatically receive a failing (F) grade.

Incomplete:

1. An "Incomplete" (I) grade will be recorded for any student with **excused** absences who is unable to complete make-up days before grading deadlines.
2. An "Incomplete" (I) grade will be recorded for any student who fails to submit checklists by the end of the practicum rotation.
3. An "Incomplete" (I) grade will be recorded for any student who fails to successfully complete 95% of checklist items by the end of the practicum rotation.
4. An "Incomplete" (I) grade will be recorded for any student who fails to submit the 3 completed reports for this practicum by the due date.

COURSE POLICIES

Attendance

In general, practicums are offered Monday through Friday during day shift hours. Exact day shift hours are assigned by each clinical affiliate. Most clinical days start between the hours of 6:30 am – 8:00 am. Some clinical affiliates may request the student come in at different hours so that students will experience special procedures or have an increased chance to participate in clinical procedures. Students may expect to spend 36-40 hours per week at the clinical site. Students must remain in the clinical site for the assigned period, except for scheduled morning, lunch, and afternoon breaks. Students are expected to seek out opportunities to learn, to gain experience, and to assist technologists when appropriate. When checklists are completed, students must continue to make the most of their educational experience throughout the required schedule for each rotation.

The student is expected to adhere to the absence (and tardiness) policy that is in place at the assigned clinical affiliate. To successfully pass the practicum, the student must have been in attendance at the clinical site at least 95% of the time, or 24 of the 25 days of practicum. In the event of a necessary absence, such as illness, the student must notify the clinical supervisor at the clinical site a minimum of 30 minutes prior to the scheduled starting time and the clinical coordinator no later than 8:00 am via email or telephone. (Messages may be left on voicemail.) Lack of notification will automatically result in an unexcused absence. Any student with more than 2 unexcused absences may be dropped from the clinical rotation. A few make-up days have been scheduled to allow for absences. The student must make-up all time missed, beyond the one-day limit, during the scheduled make-up days or at the convenience of the clinical affiliate. In the event that time cannot be made up by the end of the semester, the student will receive an "Incomplete" and will be responsible for making up the days during the following semester or at the convenience of the clinical site. Reasons for excused absences include personal illness, participation in academic functions, major religious holiday, illness of an immediate family member, and death in the immediate family. (Clinical site supervisor and clinical coordinator must be notified of any planned excused absence.)

The student is expected to report to his/her assigned department and be ready to work by the scheduled time. Tardiness is defined as greater than 7 minutes past the scheduled starting time or as leaving prior to being dismissed from the site. Three unexcused tardy incidents will be counted as an unexcused absence, and a make-up day may be required. Failure to notify appropriate personnel or failure to make-up missed clinical days may result in failure to satisfactorily complete the course.

Severe weather policy and "Plan B"

Plan B is the University's emergency severe weather plan implemented when classes must be cancelled or delayed, or offices closed. Plan B requires employees, whose job functions are considered essential, to report to work despite delays and cancellations. During adverse weather conditions, MLS students are expected to report to their clinical site at the scheduled time as long as it is possible and safe to do so. This policy remains in effect regardless of U.K. announced delays and cancellation of classes. Clinical site supervisors must be contacted prior to the rotation start time to discuss any safety issues that may prevent a student's ability to report to

his/her assigned practicum.

Dress Code and Safety Regulations
See the section 5 of the MLS Student Handbook for the program policies concerning dress code and safety regulations. Policies of the clinical affiliate will be provided to the student. The student is required to adhere to the most stringent policy provided.

Beepers, cell phones, personal calls and video/music players
Students are not to receive or place phone calls during class hours or clinical hours without the consent of the instructor and then only in the case of emergency. Cell phones must be turned off during clinical rotations. Students may use the telephone number of the staff associate in the MLS division as an emergency number. The number is: 859-323-1100, ext 80512. The staff associate will get the message to you as soon as possible. In addition, video/music players such as an MP3 player are not permitted during the clinical rotations.

Ethics
Students will maintain patient confidentiality, adhere to clinical affiliate policy regarding confidentiality, and adhere to risk management guidelines at all times.

DISTANCE LEARNING STUDENTS
(Center for Rural Health Students)

Distance Learning: Formal educational process in which the majority of instruction in a course occurs when students and instructors are not in the same place.

Instructor Information:
Virtual Office Hours: TBD
Preferred method of contact: Email (email address given at top of syllabus)
Maximum timeframe for responding to student communications: 24 hours

Technological Requirements:

- Access to a computer with Internet capabilities (DSL or Cable modems are highly recommended.)
- System Requirements for Blackboard see http://wiki.uky.edu/blackboard/Wiki%20Pages/FAQS.aspx

Technology Support:

- Contact information for Teaching and Learning Services Center (TASC):
  Website: http://www.uky.edu/TASC/
  Phone: 859-257-8272
- Contact information for Information Technology Customer Service Center (ITSC):
  Website: http://www.uky.edu/UKIT/
  Phone: 859-218-HELP

- Procedure for resolving technical complaints: Contact TASC or ITSC first, then contact instructor

Distance Learning Library Services:

- Contact information for Distance Learning Library Services:
  Website: http://www.uky.edu/Libraries/DLLS
  DL Librarian: Carla Cantagallo
  Email: dllservice@email.uky.edu
  Phone: 859 257-0500, ext. 2171; (800) 828-0439 (option #6)
  DL Interlibrary Loan Service:
  http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16

MLS 483 – IMMUNOHEMATOLOGY PRACTICUM

STUDENT_____ **Semester** _____

Evaluator: In the column that describes the student's performance, initial the items that the student has completed at your facility; sign the appropriate box at the end of the document. The numbers given are minimum numbers that the student must complete.

1= first 3 week rotation period 2 = second 3 week rotation period

	Observed	Performed under Supervision	*Competent to Perform Independently*	Weekly Assignment	Comment
1. Perform proper pre-analytical phase procedures (independently) on minimum 45 specimens					
a. Evaluate specimen and requisition acceptability				1	
b. Access sample into laboratory using manual or computerized methods				1	
c. Perform records check for previous blood bank history				1	
2. Perform Routine ABO Grouping					
a. Perform ABO grouping on minimum of 45 specimens				1	
b. Discuss ABO discrepancy workup (e.g., differentiation of group A, and A2) with instructor. Perform if available.				1/2	
3. Perform Rh Typing					
a. Perform Rh typing on minimum of 45 specimens				1	
b. Test for weak D independently on minimum 15 specimens, *if available*				1	
c. Rh phenotype (2) under supervision				2	
d. Calculate most probable genotype based on phenotype				2	
4. Serum Antibody Identification					
a. Perform routine antibody screens independently on minimum 15 specimens.				1	
b. Perform 4 routine RBC Panel-single antibody (independently)				1/2	
c. Perform 2 routine RBC panel-multiple antibody (independently)				2	
d. Utilize p Values (independently) *see Tech Manual*				2	
5. Special Procedures (Discuss with instructor/perform if available					
a. use of enzymes, *if available*				2	
b. selected cell panels				2	
c. prewarm techniques				2	
d. short cold and/or 1 hour saline (37C)				2	

	Observed	Performed under Supervision	Performed Independently	Weekly Assignment	Comment
6. Typing For Other Blood Group Antigens					
a. Perform typing for other blood group antigens on at least 5 specimens independently				2	
7. Elution					
a. Discuss *site's* policy on performing elution with instructor				2	
b. Elution Techniques-Commercial; perform 1, *if available*				2	
8. Infants Under 4 Months of Age					
a. Perform 3 cord blood workups				1	
b. Discuss exchange transfusions with instructor				2	
c. Discuss Antibody screens/cross match requirements with instructor; perform if available				2	
d. Discuss the selection of blood products with instructor; perform if available				2	
e. Discuss positive DAT's and how to resolve ABO vs. alloantibodies				2	
f. Discuss ABO Screens and perform 1, if indicated				2	
9. Processing Blood and Blood Products Into Inventory					
a. Process minimum 20 units into inventory under supervision				1	
10. Preparation Of Blood Components For Issue					
a. Pooling of platelets, including labeling (perform if available; discuss with instructor), *if available*				1	
b. Thawing of fresh frozen plasma, perform 5, *if available*				1	
c. Thawing and labeling of cryoprecipitate (perform if available; discuss with instructor); -discuss fibrin glue				1	
d. Select compatible components for issue with 100% accuracy, minimum 20 -ABO compatible Red Cell products -ABO compatible plasma products, *if available* *-Discuss use of frozen, washed red cells, if appropriate*				1/2	

	Observed	Performed under Supervision	Performed Independently	Weekly Assignment	Comment
11. Issuing Blood and Blood Products for Transfusion					
a. Issuing components including clerical check and inspection; perform 10 under supervision.				2	
b. Use of special filters: Leukocyte *reduced*, Microaggregate, component infusion set; discuss with supervisor, *if available*				2	
c. Discuss testing necessary for *random* platelets before release; *pH and glucose levels*				2	
12. Rh Immune Globulin					
a. Antepartum prophylaxis; discuss tests required with instructor				2	
b. Postpartum indications; discuss tests required with instructor, perform at least 1 workup				2	
c. Discuss use of antibody titers, why and when to be performed.				2	
13. Transfusion Reaction					
a. Discuss transfusion reaction workup with instructor				2	
14. Warm and Cold Autoantibodies					
a. ABO and/or Rh typing complications; discuss with instructor				2	
b. Identification: discuss with instructor				2	
c. Warm autoadsorption technique; discuss with instructor; perform if available				2	
d. Prewarmed and cold adsorption techniques; discuss with instructor; perform if available				2	
e. *Discuss use of REST*				2	
15. Quality Control and Quality Assurance					
a. Perform daily reagent quality control				1	
b. Perform temperature checks				1	
c. Review records and inventory with instructor				2	
d. Discuss blood usage and transfusion audits with instructor				2	
e. Discuss CAP or AABB inspection criteria with instructor.				2	

	Observed	Performed under Supervision	Performed Independently	Weekly Assignment	Comment
16. Direct Antiglobulin Testing: understand when to perform					
a. Perform 3 DAT tests using polyspecific antisera				2	
b. Perform 1 DAT test using monospecific antisera				2	
17. Autologous units					
a. Discuss use of autologous and designated units				2	
18. Crossmatches					
a. Perform 15 tube *b. Discuss alternative techniques (instrumentation)* *c. Discuss need for I.S. vs. AHG crossmatches*				2	
19. Components / Irradiation					
a. Discuss irradiation of components. Perform if available.				2	
20. Equipment Maintenance					
a. Discuss maintenance of Blood Bank equipment to include: cell washers, thawers, rotators, refrigerators, freezers, centrifuges, cell washers, heating blocks				1/2	

EVALUATORS SIGNATURES AND COMMENTS

Signatures		Comments
Name/Health Care Facility	Date	

Rev's 2009