





## Biology, Clinical Lab Sciences Concentration, BS 2019-2020 Undergraduate Program Change Form

### General Catalog Information

### \*\* Read before you begin \*\*

1. **TURN ON** help text before starting this proposal by clicking  in the top right corner of the heading.
2. **IMPORT** curriculum data from the Catalog by clicking  in the top left corner.
3. **FILL IN** all fields required marked with an \* after importing data. You will not be able to launch the proposal without completing required fields.
4. **DO NOT** type any changes before launching the proposal. If changes will occur in a required field, launch the proposal with existing attributes.
5. **LAUNCH** proposal by clicking  in the top left corner. **DO NOT** make proposed changes before launching proposal. Changes will only be tracked after proposal is launched.
6. **GO TO** discussion  in the right panel, and change "Show current" to "Show current with markup" to track changes.

For a new degree program, in addition to EPC program and course forms you must complete all procedures and forms found in the "SCHEV Proposal Guidelines."

Catalog Year of Implementation *	<input type="text" value="2019-2020"/> <input type="text" value="2019-2020"/>
If retroactive, specify catalog year:	<input type="text"/>
Hierarchy Owner*	<input type="text" value="Department of Biological and Environmental Sciences"/> <input type="text" value="Department of Biological and Environmental Sciences"/>
Type of Program*	<input checked="" type="radio"/> Major . <input type="radio"/> Minor

- Endorsement
- Certificate .
- Concentration

Is this an Interdisciplinary Program?\*

Yes  No

Does this program lead to teaching licensure, or will it affect an existing program's licensure?\*

Yes  No

### **PROPOSED PROGRAM CHANGE INFORMATION**

Title\* Biology, Clinical Lab Sciences Concentration, BS

Below, the Total Credits are for the entire program. If this program change is for a major, please list Total Credits as the credits for the entire degree, not just for the major.

Total Credits\* ~~123-125~~ 120-125

Are Total credits changing?\*

Yes  No

If total credits are changing, provide a justification

Enter a justification for the change in credit hours.

The addition of 1 credit due to change in BIOL 489 from zero to 1 credit could increase the total credits by one credit, since there are no general electives in this concentration. However, the shift in what course counts for the ADR could instead result in a decrease in total credits for students who take MATH 301 and count that in the Core Curriculum.

Delete program from Catalog?\*

Yes  No

Submit program to storage?\*

Yes  No

### **RATIONALE FOR PROGRAM CHANGES**

Enter the rationale for

BIOL 489 is changing from zero credits to 1 credit

**program changes\***

To avoid increasing the maximum total number of credits for this concentration, the requirement for immunology (4 credits) was replaced by a requirement for a minimum of 3 credits of BIOL electives at the 300 - or 400 - level.

CHEM 112 is a course that is taken by all concentrations of all majors in our department. Listing it as the Additional Degree Requirement will allow standardization across all our concentrations and majors.

MATH 261 or 301 will now be listed under major requirements and if MATH 301 is taken, it may count as the QR per spectives requirement.

The ability to count MATH 301 within the Core Curriculum reduces the minimum number of total credits for the degree.

**PROPOSED REVISION IN CATALOG DESCRIPTION OF PROGRAM****Program Catalog Description\***

Through its clinical lab science concentration, the Department of Biological and Environmental Sciences offers a 3+1 program that leads to a bachelor in biology while also gaining the qualifications to take the national certification examination given by the American Society for Clinical Pathology in pursuit of the MLS (ASCP) certification.

After taking the required coursework with a minimum GPA of 2.5, students transfer for their senior year to the affiliated Inova Fairfax Hospital School of Medical Laboratory Science for the clinical part of their training. Completion of Longwood's clinical lab science concentration cannot guarantee admission to the affiliated professional clinical lab sciences program.

\*\*Changes for 2018-19 catalog are pending SCHEV approval for official initiation in Spring 2019\*\*

Affiliated Institutions:

Inova Fairfax Hospital School of Medical Laboratory Science, located in Falls Church, VA, is full accredited by the National Accrediting Agency for Clinical Laboratory Sciences NAACLS and is certified to operate by the State Council of Higher Education for Virginia.

For more information see <https://www.inova.org/education/medical-laboratory-science> or contact:


Amy Shoemaker, MBA, MT (ASCP) DLM Program Director or

Shabrina Shah MT (ASCP), Program coordinator



Follow these steps to propose changes to the program curriculum:

**Step 1 Add all courses to be used in program.**

If you are removing courses, proceed to Step 2.

Start in  "View Curriculum Courses." There are two options to add courses for proposed changes: "Add Course" and "Import Course." For courses already in the catalog, click on "Import Course" and find the courses needed. For new classes going through a Curriculog Approval Process click on "Add Course"-- a box will open asking you for the Prefix, Course Number and Course Title.


**Step 2 Set up program requirements.**

Click on  "View Curriculum Schema." and select the core header of the program where you would like to add/remove courses to expand the section. Click on "Add Courses" to bring up the list of courses available from Step 1. Select the courses you wish to add. For removing courses click on the  and proceed.

**Step 3 Review full program structure.**

Click on  to view the full program.

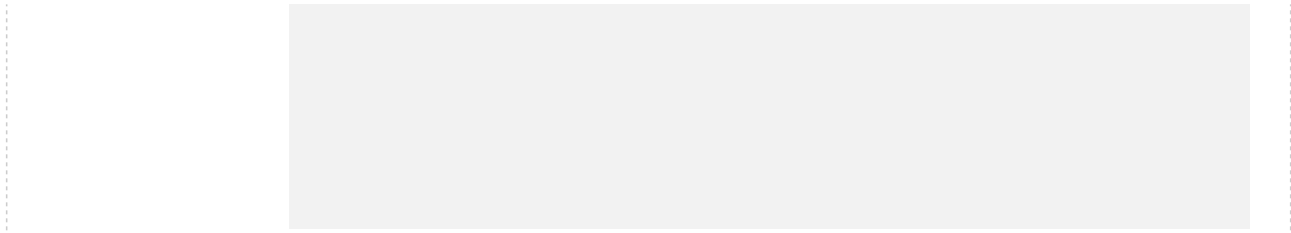
**Step 4 Track changes made**

Go to discussion  in the right panel and select "Show current with markup". Click the core header of the program to expand the section and track changes.

**Program Curriculum\***

**Course(s) to be added:\*** BIOL Elective

**Course(s) to be removed:\*** BIOL 404



<b>Course(s) to be changed:*</b>	BIOL 489 is changing to one credit.
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<b>Other Changes</b>	<b>CHEM 112 counted as the additional degree requirement ; MATH 301 may count as QR perspectives requiremen</b>
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**RESOURCE ASSESSMENT**

<b>Estimate additional staff requirements for the program change. *</b>	None
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<b>Estimate the amount and cost of any extra equipment, library resources, computer hardware or software, or other</b>	None
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resources that would be required to carry out the program change.\*

**AFFECTED DEPARTMENTS OR PROGRAMS**

Run an Impact Report by clicking  in the top left corner and answer below according to the results.

If the proposed program changes could have an impact on other departments or programs, the appropriate affected chairs or program directors should be notified of the proposed changes. Where teaching licensure may be affected, the licensure officer should also be notified.

To notify the appropriate department chairs, request a custom route, navigate to the Proposal Toolbox and select Custom Route under the Decisions icon (). Once you make your decision the system will allow you to set up the requested ad-hoc step for each section: participants, rules, decisions, and deadlines/reminders.

A System Administrator will need to review and approve your request before it takes place.

List other departments / programs that might be affected.\*

None

List individuals contacted and date contacted.\*

None

**ATTACHMENT LIST**

Please attach any required files by navigating to the Proposal Toolbox and clicking  in the top right corner.

Attach  Fee Recommendation Worksheet

All curriculum proposals/changes are processed in the date order received. In order to be included in the next academic year's catalog, all paperwork must be submitted no later than:

- February 1 to the College Curriculum Committee
- March 1 to the Educational Policy Committee (EPC)

Changes that affect spring advising for fall classes must have received approval from EPC and Senate before the registrar opens up the fall schedule for registration in March. Such proposals should reach the chair of EPC by the end of the fall semester. Submission within the deadlines does not guarantee processing in time for the next academic year's catalog.

For the Curriculum Development Handbook and all forms, see <http://blogs.longwood.edu/curriculum/>.

### **REGISTRAR ONLY**

Program OID 787

Program Type

Major

Major

Degree Type

Bachelor of Science

Bachelor of Science

Status  Active-Visible  Inactive-Hidden



## Biology, Clinical Lab Sciences Concentration, BS

### Civitae Core Requirement (39-40 credits)

Civitae Core Biology majors in the Clinical Lab Sciences Concentration may count Civitae Core courses satisfying major requirements as also satisfying their respective Civitae Core requirements, up to two Pillar courses and one Perspectives course. The following are the courses in this major that may be used in this way: MATH 171 can satisfy the Quantitative Reasoning Pillar requirement CHEM 111 can satisfy the Scientific Reasoning Pillar **requirement MATH 301 can satisfy the Quantitative Reasoning Perspectives** requirement Courses satisfying major requirements that are designated as Civitae Core courses subsequent to the print deadline of this Catalog will not appear in the above listings but will be eligible to also satisfy Civitae Core requirements, subject to the same rules as the others. (If doing so would otherwise decrease the total credits required for the degree below 120, General Elective credit must be substituted to restore the total. ) Transfer students go to Transfer-**Student Student** General Education for requirements.

### BS Degree Additional Degree Requirements ~~(3-4~~ (4 credits)

**MATH 261 The Differential and Integral Calculus I**  
[After] or

**MATH 301 Applied Statistics**  
[After]

**CHEM 112 Fundamentals of Chemistry II**

### Major Requirements ~~(51~~ (47-51 credits) (plus 6-9 credits included in the Core Curriculum

BIOL 120 Integrative Biology

BIOL 250 Introduction to Genetics and Cell Biology

[After]

BIOL 251 Introduction to Ecology and Evolution

BIOL 288 Sophomore Seminar

BIOL 488 Senior Capstone in Biology

BIOL 489 Senior Assessment

BIOL 206 Human Anatomy and Physiology I

[After] or

BIOL 301 Comprehensive Human Anatomy and Physiology I

[After]

BIOL 207 Human Anatomy and Physiology II

[After] or

BIOL 302 Comprehensive Human Anatomy and Physiology II

[After]

BIOL 304 Microbiology for the Healthcare Professional



[After] or

BIOL 305 General Microbiology

[After]

**BIOL 404 Immunology**

**[Before] Biology elective (300-400 level)/3 credits**

**[After]**

**[After]**

CHEM 111 Fundamentals of Chemistry I

[Right] (3 of which counted in the Core Curriculum)

CHEM 112 Fundamentals of Chemistry II

**[Right] (counted in the Additional Degree Requirement)**

CHEM 211 Organic Chemistry I

CHEM 212 Organic Chemistry II

CHEM 213 Organic Chemistry Laboratory I

CHEM 214 Organic Chemistry Laboratory II

[After]

PHYS 103 Conceptual Physics

MATH 171 Statistical Decision Making

[Right] (counted in the Core Curriculum)

**MATH 261 The Differential and Integral Calculus I**

**[After] Or**

**MATH 301 Applied Statistics**

**[Right] (counted in the Core Curriculum)**

## Major Requirements (affiliated school)

Inova Fairfax Hospital 30 credits

Coursework at Inova Fairfax Hospital consists of six clinical courses, including the following topics: Hematology, Microscopy, Immunohematology, Microbiology, and Chemistry.

## Total Credits Required

BS in Biology with Clinical Lab Sciences Concentration affiliated with Inova Fairfax Hospital Medical Laboratory Science Program, Falls ~~Church/123-125~~ **Church/120-125**