Program Approval Form

For approval of new programs and deletions or modifications to an existing program.

Action Requested:

- [ ] Create New (SCHEV approval required except for minors)
- [ ] Inactivate Existing
- [x] Modify Existing (check **ALL** that apply)
  - [ ] Title (SCHEV approval required except for minors)
  - [x] **Concentration** (Choose one): [x] *Add* [ ] *Delete* [ ] *Modify*
  - [x] Degree Requirements
  - [ ] Admission Standards/ Application Requirements
  - [ ] Other Changes: _____

Type (Check one):

- [ ] B.A. [x] B.S. [ ] Minor
- [ ] Master's
- [ ] Ph.D.
- [ ] Undergraduate Certificate*
- [ ] Graduate Certificate*
- [ ] Bachelor's/Accelerated Master's [ ] Other:

College/School: College of Science
Submitted by: Larry Rockwood
Department: Biology
Ext: 3-1031
Email: lrockwoo@gmu.edu

Effective Term: Fall 2017

Please note: For students to be admitted to a new degree, minor, certificate or concentration, the program must be fully approved, entered into Banner, and published in the University Catalog.

Justification: (attach separate document if necessary)

See attached

	Existing	New/Modified
Program Title: (Required) Title must identify subject matter. Do not include name of college/school/dept.	Medical Laboratory Science BS	
Concentration(s):		Histology
Admissions Standards / Application Requirements: (Required only if different from those listed in the University Catalog)		NA
Degree Requirements: Consult University Catalog for models, attach separate document if necessary using track changes for modifications		See attached
Courses offered via distance: (if applicable)		NA
TOTAL CREDITS REQUIRED:		30

***For Certificates Only:** Indicate whether students are able to pursue on a [x] **Full-time basis** [ ] **Part-time basis**

[redacted]

Del[redacted]e/School Date

If this p[redacted]boration with another unit at Mason, the originating department must circulate this proposal for review p[redacted]ary signatures prior to submission. Failure to do so will delay action on this proposal.

Unit Name	Unit Approval Name	Unit Approver's Signature	Date

For Undergraduate Programs only

Undergraduate Council Member | Provost Office | Undergraduate Council Approval Date

For Graduate Programs Only

Graduate Council Member | Provost Office | Graduate Council Approval Date

For Registrar Office's Use Only: Received_____ Banner_____ Catalog_____

revised 9/2/2016

Program Proposal Submitted to the College of Science Curriculum Committee (COSCC)

The form above is processed by the Office of the University Registrar. This second page is for the COSCC's reference. Please complete the applicable portions of this page to clearly communicate what the form above is requesting.

FOR ALL PROGRAMS (required)
Program Title: Concentration in Histology

Date of Departmental Approval:

FOR INACTIVATED PROGRAMS (required if inactivating a program)

- Reason for Inactivation:

FOR MODIFIED PROGRAMS (required if modifying a program)

- Summary of the Modification:
- Text before Modification (title, degree requirements, etc.):
- Text after Modification (title, degree requirements, etc.):
- Reason for the Modification:

FOR NEW PROGRAMS (required if creating a new program)

Reason for the New Program: The Medical Laboratory Science (MLAB) program addresses the growing national demand for trained medical laboratory scientists. It is our mission for students to gain the skills, knowledge, motivation, and insight through career-oriented laboratory education. At present the MLAB program offers broad training in medical laboratory science. However, some of our students need training in specific laboratory techniques not previously offered. Through a new concentration in *Histotechnology* we will provide students with training in a new clinical rotation that is in very high demand nationwide. At the end of training in this concentration, students will be able to take the certification test in Histotechnology and become a board certified Histotechnologist. Two of our Affiliated Hospitals will provide this training during the students' clinical year. Once students finish their clinical rotation and receive their BS degree in Medical Laboratory Science with a concentration in Histotechoogy, our experience is that they immediately receive multiple job offers.

- Relationship to Existing Programs:
  NA
- Relationship to Existing Courses:
  NA
- Semester of Initial Offering:
  Fall 2017
- Insert Tentative SCHEV Proposal Below

GEORGE MASON UNIVERSITY

Department of Biology
4400 University Drive, MS 3E1, Fairfax, Virginia 22030
Phone: 703-993-1050; Fax: 703-993-1046

January 17, 2017

Proposal for a New Concentration within the BS in Medical Laboratory Science

Title: Concentration in Histotechnology

Justification

Medical laboratory science (MLS) is the use of clinical laboratory tests to detect, diagnose, monitor, and treat disease. Medical laboratory scientists (formerly known as medical technologists) are laboratory professionals who are part of the medical team of specialists who work together to determine the presence, extent, or absence of disease. Over 70% of all medical decisions are based on medical laboratory scientist's results. Within the scientific laboratory profession is the specialized field of histotechnology (HTL). Histotechnologists are a group of trained individuals who play a vital role in patient diagnosis using microscopic examination. There is a serve shortage of HTLs throughout the United States, and this shortage is only expected to increase as the population of the United States ages. Once students complete their training they will be able to sit for the ASCP board certification. Students that become certified HTL are in high demand in the work force and students often will have multiple job offers prior to completing the program.

Curriculum
In addition to the courses required for all students earning the BS degree in Medical Laboratory Science, the following will be required for 30 credits.

1. **MLAB 401 Orientation (Total credits = 3)**

   Module 1: Orientation: Credits = 1
   Didactic – Lecture includes a review of ethics and professionalism, statistics, quality assurance in the clinical laboratory and statistical approaches to data evaluation. Safety in the hospital/laboratory is also included.

   Module 2 Clinical Laboratory Supervision and Management: Credits = 1

   Didactic – Lecture instruction on performance improvement, critical pathways, human resource management, financial management, management styles, team building skills, dynamics of health care and laboratory, communications, ethics, selection of lab computer systems and government regulations and standards.

   Module 3 Education and Research: Credits = 1

   Didactic – Lecture instruction on writing behavioral objectives; teach methods; forms of evaluation and motivation of student; research design; and basic principles of evaluating a research paper.

Rotation = hands-on rotation for four weeks in each of six hospital histology labs. Students will receive laboratory instruction on specimen dissection, different tissues, microarray, automated tissue processing, troubleshooting and maintenance to include all techniques utilized in processing and embedding.

Module 3 Microtomy Practicum: Credits = 6

There will be rotation for four weeks in each of six hospital histology labs. Laboratory instruction on principles of microtomy applicable to both paraffin and frozen sections and techniques necessary to provide quality microscope slides for clinical and research histology.

Module 4 Staining Practicum: Credits = 5

There will be rotation for four weeks in each of six hospital histology labs. Laboratory instruction on staining, properties of dyes, troubleshooting staining, H & E plus special stains, clinical correlation, techniques in immunofluorescence, immunochemistry, QC, electron microscopy, and quantitative data from microscopic specimens. Solving problems with staining will be addressed with both identification and potential resolution.