\UNIVERSITY OF MARY WASHINGTON -- NEW COURSE PROPOSAL

Electronically submit this completed form with attachments in one file to the Chair of the College Curriculum Committee.

COLLEGE (check one):	**Arts and Sciences**	x	**Business**		**Education**		
Proposal Submitted By: Lynn O. Lewis			Date Prepared: 11/8/18				
Course Title:	Literature Research in Biology						
Department/discipline and course number*:	Biol 482						
Prerequisites:	Biol 260 and permission of instructor						

**This course number must be approved by the Office of the Registrar before the proposal is submitted.*

Number of credits:	1	Will this course meet for at least 700 contact minutes for each credit hour proposed? ***If no, provide a credit hour justification.***	**YES**	x	**NO**	
Will this be a ***new***, *repeatable* "special topics" course? (Do you want students to be able to take this new course more than once if the topic changes?)			**NO**		**YES**	

Date of first offering of this ***new*** course: **FALL SEMESTER, year**	2019				
Proposed frequency of offering of the course:	Every semester				
Proposed enrollment limit for the course:	20				
List the faculty who will likely teach the course:	All members of the Biology Department				
Are ANY new resources required?	**NO**	*x*	**YES**		*Document in attached impact statement*

**The earliest the course may be offered is the fall semester of the academic year FOLLOWING the year in which the course proposal is approved.

This new course will be (check all that apply):					
Required in the major		Required in the minor		General Elective	
Elective in the major	x	Elective in the minor		General Education**	

***AFTER the new course is approved, a separate proposal must be sent to the General Education Committee.*

Catalog Description (suggested length – less than 50 words)**:**

Prerequisites: Biol 260 and Permission of Instructor. This individually mentored course allows students to practice scientific reasoning and analysis by reading, analyzing, discussing and writing about the primary literature in a specific topic area of biology. Students will then write a comprehensive synthesis paper detailing the state of knowledge in that particular field.

COURSE HISTORY:	Was this course taught previously as a topics or experimental course?	**YES**		**NO**	x
Course Number and Title of Previous Course		**Semester Offered**		**Enrollment**	

	CHECK HERE if the proposed course is to be ***equated*** with the earlier topics or experimental offerings. If equated, students who took the earlier "topics" course will only be able to take the new course as a repeat (C- grade or lower).

NOTE: If the proposed course has not been previously offered as a topics or experimental course, **explain in the attached rationale statement** why the course should be adopted even though it has not been tried out.

REQUIRED ATTACHMENTS:

1. **Rationale Statement** – Why is this course needed? What purposes will it serve?
2. **Credit Hour Justification** (if required) – explain how this course will comply with the UMW Credit Hours Policy (D.5.3)
3. **Impact Statement** – Provide details about the Library, space, staffing, budget, and technology impacts created by adding this new course. Include supporting statements from the Library, IT Department, etc. ***Any change that impacts another Department must have a written statement (such as an email) from the Chair(s) agreeing to the change.***
4. **Sample Syllabus**

Department Chair Approval*: Lynn O. Lewis **Date:** 11/8/18

CCC Chair Approval: [signature] **Date:** 12/03/2018

***COB and COE proposals approved by the Associate Dean. *BEFORE* consideration by the UCC, the proposal must be approved the two levels noted above. Approval by the UCC and UFC are noted on the proposal "status history"**

at the UCC web site.

Ratonale: We currently offer Biol 481, Readings in Biology, which is meant to be a course leading to an independent study project. Occasionally students ask if they can do a literature review and paper on a particular topic in biology without developing a research project. This course is designed to allow students to make that choice. In the past, we have occasionally allowed a student to take Biol 481 without continuing on to a research project, but we would prefer to separate the courses based on the goal of the student.

BIOL 482, *Literature Research in Biology*

Credits: 1

Instructor: Variable

Eligibility: Open to senior Biology majors by permission of the Department of Biological Sciences

Meeting times: One hour per week; meeting times and days negotiated with the instructor

Course Description: This individually faculty-mentored course allows students to practice scientific reasoning and analysis by 1) reading, analyzing and discussing the primary literature in a specific area of biology and 2) developing a comprehensive literature review of that specific area. Students will read review articles, recent primary scientific reports and scholarly monographs to develop their comprehension of a particular subject in order to understand the current state of research in that area of biology. Students will write a comprehensive synthesis paper detailing the state of knowledge in that particular area.

Upon completing this course, students should be able to:

1) Distinguish between primary and secondary sources of scientific literature.
2) Access primary biological literature and manage information garnered from it.
3) Understand and interpret primary scientific reports in a specific sub-discipline of biology.
4) Synthesize, apply, and properly cite information from multiple primary sources in their own scientific writing.
5) Write a synthesis paper, including all the sources that were utilized during the semester.

Expectations: While receiving guidance from their faculty mentors, students are expected to locate and manage primary scientific publications in the biological sciences and to independently synthesize relevant information from them. Students should meet weekly with their mentors and seek additional instruction and advice on an as-needed basis. Synthesis papers should include a thorough review of relevant background information on the area of biology related to the subject.

Grading Criteria:

1) Understanding of readings
    a. Spend an appropriate amount of time reading articles
    b. Summarize the article by writing your own literature review

   c. Fit what you learn from various articles into a cohesive framework as you read them
   d. Discuss each article with the instructor
   e. Learn new vocabulary
   f. Learn about new techniques
2) Writing a synthesis paper
   a. Determine what information you will use from each source
   b. Use the framework developed above to relate your sources to each other
   c. Use citations of your sources in an appropriate way

Grading:

The grade scheme will reflect the following from the *Academic Catalog*:

A	excellent
A-	
B+	
B	commendable
B-	
C+	
C	acceptable
C-	
D+	
D	marginal
F	failure

Honor System:

All graded work must be your own and pledged according to the Honor Code: *I hereby declare upon my word of honor that I have neither given nor received any unauthorized help on this work.*