



# Course Approval Form

For approval of new courses and deletions or modifications to an existing course.

registrar.gmu.edu/facultystaff/curriculum

### Action Requested:

Create new course       Inactivate existing course

Modify existing course (check all that apply)

Title       Credits       Repeat Status       Grade Type

Prereq/coreq       Schedule Type       Restrictions

Other: \_\_\_\_\_

### Course Level:

Undergraduate

Graduate

**College/School:** Science      **Department:** Biology

**Submitted by:** Valerie Olmo      **Ext:** 3-1051      **Email:** volmo@gmu.edu

**Subject Code:** BIOL      **Number:** 302      **Effective Term:**  Fall       Spring      Year: 2016

Summer

(Do not list multiple codes or numbers. Each course proposal must have a separate form.)

**Title:** Current \_\_\_\_\_

Banner (30 characters max including spaces) \_\_\_\_\_

New: Alternative careers in Biology

**Credits:** (check one)  1 Fixed      \_\_\_\_\_ or \_\_\_\_\_       Variable to

**Repeat Status:** (check one)  Not Repeatable (NR)       Repeatable within degree (RD)       Repeatable within term (RT)      Maximum credits allowed: \_\_\_\_\_

**Grade Mode:** (check one)  Regular (A, B, C, etc.)       Satisfactory/No Credit       Special (A, B, C, etc. +IP)

**Schedule Type:** (check one)  Lecture (LEC)       Lab (LAB)       Recitation (RCT)       Internship (INT)

Independent Study (IND)       Seminar (SEM)       Studio (STU)

**Prerequisite(s):** N/A      **Corequisite(s):** \_\_\_\_\_

**Instructional Mode:**

100% face-to-face

Hybrid: ≤ 50% electronically delivered

100% electronically delivered

**Restrictions Enforced by System:** Major, College, Degree, Program, etc. Include Code.

\_\_\_\_\_

**Are there equivalent course(s)?**

Yes       No

If yes, please list \_\_\_\_\_

### Catalog Copy for NEW Courses Only (Consult University Catalog for models)

<b>Description</b> (No more than 60 words, use verb phrases and present tense)	<b>Notes</b> (List additional information for the course)
This course will explore non-traditional careers that utilize a biology degree. Weekly seminars will allow biology undergraduates to discuss and explore the broad-range of career options that utilize a biology degree with professionals in those fields.	Biology majors only
<b>Indicate number of contact hours:</b> _____      Hours of Lecture or Seminar per week: 1.5      Hours of Lab or Studio: _____	
<b>When Offered:</b> (check all that apply) <input type="checkbox"/> Fall <input type="checkbox"/> Summer <input checked="" type="checkbox"/> Spring	

### Approval Signatures

Department Approval: \_\_\_\_\_ Date: 12/9/14      College/School Approval: \_\_\_\_\_ Date: \_\_\_\_\_

If this course includes subject matter currently dealt with by any other units, the originating department must circulate this proposal for review by those units and obtain the necessary 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 Graduate Courses Only

Graduate Council Member \_\_\_\_\_      Provost Office \_\_\_\_\_      Graduate Council Approval Date \_\_\_\_\_

---

## Course Proposal Submitted to the Curriculum Committee of the College of Science

### 1. COURSE NUMBER AND TITLE: BIOL302- Alternative careers in biology

#### Course Prerequisites/Co-requisite:

N/A

#### Catalog Description:

This course will explore non-traditional careers that use a biology degree, but are not in academia or health-related professions. During weekly seminars, biology undergraduates will interact with professionals with degrees in Biology but have successfully transitioned into a broad range of careers including national security, journalism, and more.

### 2. COURSE JUSTIFICATION:

#### Course Objectives:

This half-semester course will offer biology majors the opportunity to interact with professionals who have used their biology degrees for non-traditional biology careers. A major objective for this course is to offer students a forum within which to explore individual strengths and weaknesses in order to identify potential career paths outside of academia and medicine. This course is expected to retain biology students who are genuinely interested in biology, but are disillusioned with their prospects in medicine and academia.

#### Course Necessity:

The biology undergraduate student body with an interest in health-related careers are well served with the pre-health program. However, few resources provide employment options and alternative career paths for the non-health biology undergraduate. This seminar series will bridge this gap and expose our students to the plethora of alternative careers in biology and how to prepare them to enter that workforce upon graduation from GMU.

#### Course Relationship to Existing Programs:

This course helps fulfill the career development goals in the BS and BA in Biology degrees.

#### Course Relationship to Existing Courses:

No similar course is available to Biology undergraduates.

### 3. APPROVAL HISTORY:

This will be a new course for Biology.

### 4. SCHEDULING AND PROPOSED INSTRUCTORS:

#### Semester of Initial Offering:

Spring 2016

#### Proposed Instructors:

Valerie Olmo and Geraldine Grant

---

## BIOL 302- Alternative careers in Biology (1 credit)

### **Tentative Course description:**

Do you love biology, but have no interest in becoming a doctor, a teacher or a scientist? Do not despair! This course is designed to explore non-traditional careers that utilize a biology degree. Every week, students will interact with professionals who have successfully translated their biology degrees into successful careers in a wide-array of career paths. These professionals will share their motivations, strategies, and advice for breaking out of the traditional trajectory and into new and exciting fields for budding biologists.

### **Objectives for this course:**

- To offer students the opportunity to hear from professionals who have used their biology degrees for non-traditional careers (ie- pre-health, education, research)
- Retain biology students who are genuinely interested in biology, but are disillusioned with their prospects in traditional biology careers
- Allow students to reflect on their own strengths and weaknesses to identify fields suited for their personal definition of success

### **Format of the course:**

- seminar course
- speaker will present their career trajectory, advice about what courses are useful to take in preparation for a career in their field and allot time for student questions

### **Student Assessment:**

60%- Weekly written assignments addressing the following questions:

1. Based on the previous week's discussions and presentation, what courses currently offered at GMU would be most useful to prepare for that career path?
2. Based on my strengths, what could I bring to this field?
3. Based on my weaknesses, what would be my biggest challenges in this field?

30%- A final written assignment outlining a potential career plan including planned undergraduate coursework and extracurricular activities (research opportunities, internships, etc)

10%- Participation/attendance

Sample syllabus/topics to be covered:

Date	Topic	Name of the speaker
Week 1	Introduction and self-evaluation	Val Olmo and Gerry Grant
Week 2	National security	CIA representative
Week 3	Journalism	Scientific writer
Week 4	Scientific illustration	Scientific illustrator
Week 5	Scientific law	Patent lawyer
Week 6	Public relations	PR person
Week 7	Environmental consulting	Esther Peters
Week 8	Industry	Dr. Polayes