

MMG Undergraduate Research Form

Non-HCOL student _____ HCOL student _____

| Semesters in Lab | Course | Credit Hours (1 cr. hr. = 3-4 hr./week in lab) |
|------------------------------------|---------|---|
| 1 st semester | MMG 197 | |
| 2 nd semester | MMG 198 | |
| 3 rd semester | MMG 297 | |
| 4 th (or more) semester | MMG 298 | |

Project Title _____

Student Investigator _____ Net ID _____

E-mail _____

Research Mentor _____ Department _____

E-mail _____

The **Research Mentor** is expected to make clear to the student what the expectations are prior to initiating the project. These include:

- the project and its scope
- the time commitment associated with the project and course credits
- the student's research paper or poster and oral presentation
- the grading for the course (see attached course syllabi)

UVM Lab Safety Training Courses must be completed and verified by the Research Mentor (<https://www.uvm.edu/riskmanagement/train-and-inform-lab-personnel>). Additional lab-specific safety courses may be required by the research mentor.

SIGNATURES:

Student _____

Research Mentor _____

This form must be emailed to the Undergraduate Research Coordinator before a registration override can be given into course. Variable credit is determined at the time of registration.

Undergraduate Research Course Syllabi **MMG 197, 198, 297, 298**

Undergraduate Research Coordinator: Douglas Johnson; Douglas.Johnson@med.uvm.edu

Pre-requisites or co-requisites: Undergraduate Research Coordinator permission required

Course Description: MMG Undergraduate Research courses are designed to provide MMG undergraduate students the opportunities to do independent research with UVM faculty members in the life sciences. Research opportunities are available with most MMG research faculty but students are also encouraged to explore the wide variety of research programs available at UVM and the Larner College of Medicine.

There are four research course offerings available:

1. MMG 197:

- designed for students taking research credit for the first time
- usually taken for 1 credit hour
- usually taken Pass/Not Pass
- responsibilities:
 - attend lab meetings
 - write a brief literature review and/or overview of lab research ... due by the first day of finals week

2. MMG 198:

- designed for students in their second semester in lab
- variable 1-3 credit hours ... each credit hour = 3 to 4 hours/week in the lab
- graded performance ... based on participation, enthusiasm, work ethic
- responsibilities:
 - write a short (2-3 page) proposal on what hypothesis/question will be addressed and what approaches will be taken ... this is usually done within the first couple weeks of the semester
 - attend and actively participate in lab meetings
 - give an oral presentation to the lab group at the end of semester ... due by the first day of finals week
 - present a research paper or poster to the research mentor on what was accomplished during the semester ... due by the first day of finals week

3. MMG 297:

- designed for students in their third semester in lab
- variable 3-4 credit hours ... each credit hour = 3 to 4 hours/week in the lab
- graded performance ... based on participation, enthusiasm, work ethic, productivity

- responsibilities:
 - write a short (2-3 page) proposal on what hypothesis/question will be addressed and what approaches will be taken ... this is usually done within the first couple weeks of the semester
 - attend and actively participate in lab meetings
 - give an oral presentation to the lab group and UEC ... due by the first day of finals week
 - present a research paper or poster to the research mentor on what was accomplished during the semester ... due by the first day of finals week
 - present at either MMG Undergraduate Research Day or UVM Research Day

4. MMG 298:

- designed for students in their fourth semester in lab
- variable 3-4 credit hours ... each credit hour = 3 to 4 hours/week in the lab
- graded performance ... based on participation, enthusiasm, work ethic, productivity
- responsibilities:
 - write a short (2-3 page) proposal on what hypothesis/question will be addressed and what approaches will be taken ... this is usually done within the first couple weeks of the semester
 - attend and actively participate in lab meetings
 - give an oral presentation to the lab group and UEC ... due by the first day of finals week
 - present a research paper or poster to the research mentor on what was accomplished during the semester ... due by the first day of finals week
 - present at either MMG Undergraduate Research Day or UVM Research Day

Grading Criteria/Policies: The Research Mentor will forward via email a letter grade for the student to the Undergraduate Research Coordinator prior to the semester grading deadlines. The Research Mentor can base this grade on the overall performance of the researcher during the semester (80%), the research paper or poster (10%), and the oral presentation (10%). Research Mentors have the ability to adjust their grades according to their own expectations for the course, which should be described to the student prior to initiating the course.

Credit Hours Towards Major/Minor Requirements:

- MMG 197 and MMG 198 research credits cannot be counted towards the upper-level elective course requirements for MICR and MGEN majors
- no more than 6 credit hours of MMG 297 and MMG 298 can count towards the upper-level elective course requirements for MICR and MGEN majors
- no research credit hours can count towards the upper-level 9 elective credits for MICR or MGEN minors
- research credit hours can count towards the BINF minor

Student Learning Accommodations: In keeping with University policy, any student with a documented disability interested in utilizing ADA accommodations should contact Student Accessibility Services (SAS), the office of Disability Services on campus for students. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly recommended to discuss with their faculty the accommodations they plan to use in each course. Faculty who receive Letters of Accommodation with Disability Related Flexible accommodations will need to fill out the Disability Related Flexibility Agreement. Any questions from faculty or students on the agreement should be directed to the SAS specialist who is indicated on the letter.

Contact SAS: A170 Living/Learning Center; 802-656-7753; access@uvm.edu
www.uvm.edu/access

Important UVM Policies

Religious Holidays: Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time. <https://www.uvm.edu/registrar/religious-holidays>

Academic Integrity: The policy addresses plagiarism, fabrication, collusion, and cheating. <https://www.uvm.edu/policies/student/acadintegrity.pdf>

Grade Appeals: If you would like to contest a grade, please follow the procedures outlined in this policy: <https://www.uvm.edu/policies/student/gradeappeals.pdf>

Grading: For information on grading and GPA calculation, go to <https://www.uvm.edu/registrar/grades>

Code of Student Conduct: <http://www.uvm.edu/policies/student/studentcode.pdf>

FERPA Rights Disclosure: The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974.
<http://catalogue.uvm.edu/undergraduate/academicinfo/ferparightsdisclosure/>

Promoting Health & Safety: The University of Vermont's number one priority is to support a healthy and safe community:

Center for Health and Wellbeing: <https://www.uvm.edu/health>

Counseling & Psychiatry Services (CAPS): Phone: (802) 656-3340

C.A.R.E.: If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <https://www.uvm.edu/studentaffairs>

Alcohol and Cannabis Statement: The Division of Student Affairs has offered the following statement on alcohol and cannabis use **that faculty may choose to include, or modify for inclusion**, in their syllabus or Blackboard site:

Statement on Alcohol and Cannabis in the Academic Environment

As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to learn and retain information not only in the moment you may be using, but up to 48 hours or more afterwards. In addition, alcohol and cannabis can:

- Cause issues with attention, memory and concentration
- Negatively impact the quality of how information is processed and ultimately stored
- Affect sleep patterns, which interferes with long-term memory formation

It is my expectation that you will do everything you can to optimize your learning and to fully participate in this course.