

# Physics 290.2: Introduction to Research Process Syllabus

Spring 2015

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Office Hours: Monday 10-12  
Tuesday 9-10  
Wednesday 10-11  
Thursday 10-11

**Text:** Malenda, Ruth Fraser, "Rotationally Inelastic Collisions of Helium with the NaK Molecule" (2012). Theses and Dissertations. Paper 1302.

**DO THE ASSIGNED READINGS PRIOR TO CLASS-** this will allow you to become familiar with the terms and topics and have questions about the material prepared before lecture

## Course Description:

The class focuses on the process and experience of how to work in a research group. Students practice reading scientific papers and running through a simple code tutorial, but during this time participate in weekly group meetings and keep a research journal.

## Course Goals:

The main goal of the course would be to prepare students to participate in a research group for experiences such as an REU or SOAR project. Students will read my dissertation and scientific papers, run practice tutorials for a molecular dynamics code, keep a research journal and have "group meetings" to discuss the readings. Reading scientific materials and keeping a research journal are skills that have to be cultivated and learned, but can be applied in any research group. Thus, while the content of the readings will be focused on my area of research, the skills acquired while doing so will be beneficial for any student planning to participate in a research group.

## Grading:

This class is taught as pass/no credit. There will be no traditional graded assignments such as quizzes or exams. Students must actively participate in the class by completing the readings, making notes of questions, and being involved in the discourse during group meetings.

If a student's participation does not meet expectations, a formal warning in the form of an email will be given. If performance in the class does not improve, the student can be dismissed from the class and receive no credit.

## Disabilities and Medical Conditions:

Moravian College adheres to the principles and mandates of the Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1973. Students who wish to request accommodations in this class for a disability should contact Elaine Mara, assistant director of learning services for academic and disability support at 1307 Main Street, or by calling 610-861-1510. Accommodations cannot be provided until authorization is received from the Academic Support Center.

Students who wish to request accommodations in this class for a disability should contact Ms. Elaine Mara, Assistant Director of Academic & Disability Support, located on the first floor of Monocacy Hall (extension 1401). Accommodations cannot be provided until authorization is received from the Academic & Disability Support office.

It is the responsibility of the student to request accommodation well in advance of the need in order to give the College a reasonable amount of time to evaluate the documentation and implement the request. Classroom accommodation requiring notification to faculty must be requested for each semester for which it is needed.

Please see Disability Support Services in the Campus Offices and Services section elsewhere in the Moravian College Student Handbook for further information, and check the College's website for periodic updates concerning services for students with disabilities.

**Academic Honesty Statement:**

Academic integrity is the foundation on which learning at Moravian College, Moravian Theological Seminary, and the Comenius Center is built. Students are expected to perform their academic work honestly and fairly. In addition, students should neither hinder nor unfairly assist the efforts of other students to complete their work.

In an academic community, students are encouraged to help one another learn. Because no two students learn in exactly the same way or absorb exactly the same things from a lecture, students are encouraged to study together. The boundaries on what is or is not acceptable work may not always be clear; thus, if at any point in academic work at Moravian, students are uncertain about their responsibility as scholars or about the propriety of a particular action, please see Academic Honesty in the Academic Life section elsewhere in the Moravian College Student Handbook for further information, and check the College's website for periodic updates.