

Stages of Discovery: Revolutions in Art and Science is a full-time, 2-quarter program designed to introduce students to the tools artists and scientists use to investigate our ever-changing world. We will study two historical periods characterized by major revolutions in scientific and artistic practice, and we will investigate what art and science have to offer one another, both then and now. Our work will culminate in winter quarter with research-based collaborative performances.

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Required Texts - Fall Quarter

- *The Essential Galileo*, edited and translated by Maurice A. Finocchiaro. ISBN 9780872209374.
- *Galileo: A Very Short Introduction*, by Stillman Drake. [electronic book freely available through Evergreen library; printable version available at program web-site]
- *Relativity, The Special and General Theory*, by Albert Einstein, translated by Robert W. Lawson, introduction by Roger Penrose, commentary by Robert Geroch, historical essay by David C. Cassidy. ISBN 9780131862616.
- *The Tempest* (The New Cambridge Shakespeare), by William Shakespeare, edited by David Lindley. ISBN 9780521293747.
- *Hamlet, Prince of Denmark* (The New Cambridge Shakespeare), by William Shakespeare, edited by Philip Edwards. ISBN 0521532523.
- *Life of Galileo*, by Bertolt Brecht, foreword by Richard Foreman, introduction by Norman Roessler, edited with an introduction by John Willett and Ralph Manheim, translated by John Willet. ISBN 9780143105381.
- *Arcadia*, by Tom Stoppard. ISBN 9780571169344.
- *“They Say/I Say”: The Moves That Matter in Academic Writing* (Second Edition), by Gerald Graff and Cathy Birkenstein. ISBN 9780393933611.

You must have access to your own copy of these texts, as full participation in class activities require your own copy to work from.

Program Learning Goals

Our learning goals for the program are modeled after the “Expectations of an Evergreen Graduate” but also speak directly to the content and methodologies covered in the program.

- *Improve your ability to articulate and assume responsibility for your own learning*
- *Improve your ability to communicate creatively and effectively*
- *Improve your ability to engage with challenging texts and ideas*
- *Improve your ability to learn collaboratively*
- *Demonstrate independent and critical thinking, which includes creative and intellectual risk taking*
- *Develop an understanding of the investigative methods used by artists and scientists*
- *Demonstrate understanding of the intellectual and cultural paradigm shifts studied in the program*
- *Reflect on the personal and social significance of your learning through the practice of reflexive thinking*

Writing in This Program

In the case of both creative and critical writing, we are interested in helping students become more confident in using **writing as a way of thinking** through the texts, exercises, and ideas presented in the program. In fall quarter, we will devote significant attention to students’ critical writing, drawing heavily on principles and exercises in *They Say/I Say: The Moves that Matter in Academic Writing* and paying particular attention to the process of revision. In the winter quarter, students will apply critical thinking and writing skills to the process of creating original theatrical scripts.

Program Activities

Lectures: Lecture discussions will assume that you have read and struggled with the material before coming to lecture. In the interactive lectures, we will provide context for the readings and other program content, work through conceptual difficulties, pay attention to the strategies used by the thinkers we study and the authors we read, make connections between our various areas, and gather questions. We will engage in active learning methods including exploratory writing and small-group work.

Seminars: Seminars will be dedicated to collaborative learning through close reading of the texts. Our goal is not so much to reach consensus about the meaning of the works we study but to develop the tools to engage in critical, respectful conversations about the material, learning from each other as well as from the texts themselves.

Performers Workshop: Performers Workshop will focus on helping you develop your ability to use the body as an instrument. By exploring the plays we read in seminar from the inside out, you will begin to be able to think about the forms you want to work with in your winter quarter research-based scripts.

Screenings: Semi-regular Screenings will provide us with examples of particular actors’ interpretation of the texts we read. Perhaps more importantly, they will also allow us to consider the crucial differences between film and theater as performance media, while helping students develop their skills in visual analysis.

Physicists Workshop: Activities in Physicists Workshop will give you further exposure to concepts and phenomena discussed in our texts and lectures, while offering you the opportunity to extend that learning further. You will consistently connect theory to practice through supportive hands-on experiences, developing your conceptual understanding and process skills and improving your quantitative literacy,

especially related to interpreting graphs and creating them on a computer. You will work in rotating teams in Physicists Workshop, modeling the collaborative process of contemporary academic work in science.

Writers Workshop: The goal of Writers Workshop is to strengthen your written communication skills and critical reasoning abilities. We will explore specific methods and techniques frequently employed by successful communicators and provide opportunities for you to gain skill and confidence in recognizing and using these rhetorical devices. Many of the readings and exercises for Writers Workshop will be from the text *They Say/I Say: The Moves that Matter in Academic Writing*. Small working groups and peer evaluation processes will be a regular feature of this workshop.

Assignments Overview

Reading Assignments: Each week you will have Reading Assignments associated with seminars, lectures, and workshops. These Reading Assignments must be completed as best you can before the relevant session. We recommend that you complete the Reading Assignments over the weekend and read them again before the relevant sessions. The tentative schedule of readings is given at the end of this document, with details and any updates available at the program web-site.

Seminar Papers & Responses: For each Monday and Thursday seminar, you will write a short Seminar Paper (300 – 500 words long) based on the reading for that seminar. Prompts for the Seminar Papers for a given week will be available by 9 am the previous Friday. You will post each Seminar Paper to an on-line forum at our password-protected program web-site by 9 am of the day of the seminar associated with that Seminar Paper.

In addition to posting a Seminar Paper prior to each Seminar, you will read and respond to two or more of your colleagues' Seminar Papers by 9 am the morning after the seminar associated with that Seminar Paper.

Physics Figures & Problem Sets: For each Wednesday's physicists workshop, you will create a Physics Figure as specified in that workshop. You will submit your Physics Figure by 6 pm that day (for students who have regular work or other commitments on Wednesday afternoon, we can arrange an alternate time - please come talk to us). The next day, several anonymous Physics Figures will be discussed in class. Physics Figures will be returned with comments by the following Monday; you may choose to revise and resubmit your Physics Figure.

By the beginning of the next physicists workshop, you will submit your Physics Problem Set, in which you will extend or apply what you have learned in the previous week's physics work (these questions will be provided in the previous week's physicist's workshop).

Weekly Reflections: In the last (lecture) session of each week, you will spend class time reflecting on the content you have covered, the process skills you have experienced, and the interdisciplinary connections you have made during that week and in the program up to that point. You will participate in this reflection via weekly private informal writing; this will serve as raw material for your ongoing critical reflection and self-evaluation practices and writing. On an approximately bi-weekly basis, you will also be asked to provide faculty with brief updates and feedback.

Critical Essays: Three times a quarter, you will submit a formal Critical Essay for faculty review. You are free to choose the topic for these essays, which should be 4 – 6 pages (2500 – 3000 words) long, by revising and further developing one of your Seminar Papers or any of the pieces produced in writing workshop, or by choosing another subject related to the program texts. These Critical Essays will be peer-reviewed in writer's workshop in weeks 3, 6, and 9, and submitted to your faculty by 5 pm Friday of that week. In weeks 4 and 7, you will have an individual writing conference with your faculty to discuss the essay you submitted the previous week.

Comprehensive Exam: In week 10, you will prepare for and take an exam in which you will demonstrate your understanding of the content and process skills you've learned in the program. As a class, we will decide on and design the topics and format of the exam.

Portfolio: Throughout the quarter, you will prepare a portfolio of your work consisting of all the above assignments as well as any notes or other material that reflects your work during the quarter. The portfolio will be submitted during week 10 and will inform faculty evaluations, and it will also provide a lasting record and resource for your own future reference.

Building a learning community

The word “community” is often overused and misunderstood in contemporary American society, but the idea of a “learning community” has a very specific, and very rigorous, meaning for us as Evergreen faculty. It means that we all have the capacity to learn from each other, and that we all have a responsibility to cultivate the ideal conditions for collaborative learning. Community is a state of being in the world that we must work to achieve, and collaborative learning is perhaps the hardest thing you will be asked to do at Evergreen; it is also the most broadly applicable set of skills you can develop in an Evergreen program.

Participating successfully in a learning community does not mean that we all agree with each other all the time, or that conflicts never emerge. It means that we acknowledge each other as human beings, take delight in the variety of perspectives we bring to the table, and seek to address conflicts and differences of opinion with a spirit of generosity and flexibility.

The following guidelines are designed to help us structure the difficult work of building a learning community. Please note that these are guidelines for faculty as well as for students.

Respect

To create and participate in a community capable of sustaining intense, respectful interaction we must:

- strive to be aware of how our actions affect others and be honest with others about how their actions affect us;
- be willing to respond productively when faculty or other students ask you to modify your behavior;
- act in accordance with the Evergreen Social Contract, as well as the smoking, fragrance, non-discrimination, and sexual harassment policies;
- clean up after yourself--do not expect your colleagues or the overworked janitorial staff to do so;
- give all people opportunity and encouragement to speak;
- maintain a reflective and respectful approach to the study of our own and others' experiences and knowledge.

Engagement

To be engaged in our individual and community work means generating and sharing personal interpretations and understandings such that we make the material and ideas our own. Doing so requires, at a minimum, fulfilling our responsibilities to:

- attend class and keep appointments punctually;
- attend and be actively involved in all program sessions unless prevented by sickness or outside responsibilities.

Special responsibilities of students:

- attend all scheduled classes and arrive on time, except when illness or other serious circumstances prevent this; we ask that students notify faculty about planned or unplanned absences and consult with their peers about what they have missed;
- follow and respect all lab safety protocols and requirements, including completing a lab safety quiz and reconnoiter, safe and appropriate use of equipment, careful attention to safety rules, and appropriate and timely clean-up;
- complete all assignments in full and on time;
- maintain a portfolio of all work, assessments, and evaluations;
- write self-evaluations each quarter, including a transcript worthy self-evaluation at the end of the program;
- write faculty evaluations at the end of the program.

Special responsibilities of faculty:

- during the fifth week of each quarter, notify any student who might not receive full credit for that quarter;
- give prompt and thoughtful responses to student work;
- make time available for individual conferences with students, including a check-in conference in Week 2 and writing conferences in weeks 4 and 7;
- handle all disputes in a spirit of respect and goodwill;
- conduct interactions collaboratively and professionally;
- actively participate in faculty seminars and planning meetings.

Academic Honesty

In an academic community, sharing and taking responsibility for our own ideas is vital. At the same time, acknowledging use of other people's ideas is equally important. Often our work will be collaborative, so we must get into the habit of acknowledging the people and ideas that have influenced us. At other times, we will be asked to take individual positions--in essays, research projects, and seminar discussions--and assert our own distinctive interpretations and judgments. In the end, we must take responsibility for our own work while also recognizing the contributions of those who have influenced our learning.

Failure to make such acknowledgments and present the work of others as our own is plagiarism. Any student who knowingly plagiarizes material will be asked to leave the program and may be required to leave the college. If you are uncertain about whether or not you may be plagiarizing, it is always best to ask your faculty.

Resolving Conflicts

Academic and personal conflicts inevitably arise in learning communities. The Social Contract lays out a useful set of expectations about how we should deal with such conflicts:

Evergreen can thrive only if members respect the rights of others while enjoying their own rights. ... All [members of the community] must share alike in prizing academic and interpersonal honesty, in responsibly obtaining and in providing full and accurate information, and in resolving their differences through due process and with a strong will to collaboration. (The Social Contract--WAC 174-120-020)

We expect everyone to abide by these principles of honest and face-to-face resolution of conflicts. In the event that you have not been able to resolve a conflict, you can bring your concerns to the attention of your seminar leader or to the faculty team. Any conflicts that cannot be resolved by your own efforts, those of your seminar leader, or the faculty team may be brought to Student Services faculty; our Core Connector, Sara Martin, is an important resource in this regard. If all these methods fail to bring about resolution, the conflict may be referred to an academic dean or other mutually agreed upon mediator.

Disputes about credit or the content of an evaluation must first be addressed to the faculty member who wrote the evaluation. If a student is not satisfied after a discussion with the faculty member involved, then the issue will be addressed by the faculty team. The program faculty will make final decisions about credit and evaluations, though an academic dean may be consulted in the event of a factual dispute.

Credit Policy

Of course, college credit depends on college-level work. Faculty take for granted that this implies attendance and punctuality at all program events and timely completion of all assignments. Faculty will assess the quality of student work along the way. Determination of whether or not student work is credit worthy will be made when a student completes (or exits) the program.

Credit is a matter of what a student achieves, not where a student began. In determining credit, faculty will assess both the quality of student work throughout the program and what a student subsequently accomplishes. Because ours is a fully integrated interdisciplinary program there is no guarantee that partial work will result in partial credit.