Fall 2016 Catalyst Course Descriptions

Catalyst 110: Personal Stories, Public Lives (Roy)

Whether through autobiographies and memoirs, on reality TV or YouTube, in social media postings or in job interviews, people often share parts of their personal stories with the public. Why do we publicize our private lives? What roles do personal stories play in shaping public images and professional reputations, in how we advocate for causes, promote political campaigns and even change the course of history? By applying theories of communication to a variety of case studies, we will explore how, why and to what effects people communicate their personal stories for the public.

Catalyst 110: Gender Matters (McGowan)

This course will deal with gender-related issues (matters) in American culture and society. Topics will include: historical background of gender issues, the role of gender and sexuality in youth culture/high school and college in the past and present, the history of the Pill as a crucial turning point in the lives of women and men, the role of film in creating and disseminating gendered message. The course will pose the question: Does gender matter in the twenty-first century or have we achieved a state of perfect equality in public and private life? The course will use books, films, articles, and web sources to explore these issues.

Catalyst 110: Shakespeare & Popular Culture (Pleiss Morris)

In his introductory poem in the First Folio, Ben Jonson wrote that Shakespeare “was not of an age, but for all time!” In this course, we will explore how the purveyors of popular culture have ensured Shakespeare’s longevity by adjusting his works to suit new genres, new social constructions, and new aesthetic tastes. We will consider the following questions: How have Shakespearean texts been manipulated to suit the needs of artists and audiences over the centuries? Are Shakespeare’s plays “universal” in their appeal? In what ways might pop culture adaptations be less about the “greatness” of Shakespeare and more about the sociocultural values of the times and places in which they are created? In addition to selected Shakespeare plays, our texts will include musical scores, films, artwork and visual designs, and live performances. This course requires a field trip to the American Player’s Theater; in addition to books, students should budget for a course materials fee of $25.

Catalyst 110: Monsters, Deviants, and Outcasts in French Literature (Poncelet)

This course examines how and why literature creates and portrays beings that are scary, most often because they fall outside what society considers normal or because they are at the margins of what is believed to be real. By creating monsters, deviants, and outcasts in imaginary or realistic worlds, literary texts offer us venues to explore the social and psychological mechanisms that drive our fears. In some cases, literary texts invite us to question the norms by which we judge those who are different. In many cases they also show us how haunted we are by ancient myths or allegories from the past, and reveal the “monsters”
that dwell within our minds. All the texts used in this course are in English translation. No knowledge of French is required.

**Catalyst 110: Fairy Tales and Contemporary Retellings (Gannon)**

Disney princesses, happy endings, heavy-handed morals, and wealthy Victorian children reading the Grimm brothers at bedtime: these are just some of the things you think of when you hear the words “fairy tale,” right? What if I told you that fairy tales were told for hundreds of years all over the world before they were ever written down, that they have no single author, that they have mutated or been purposely altered over generations, and that, according to novelist John Updike, “They were the television and pornography of their day, the life-lightening trash of preliterate?” In this course we will examine the history and moral complexity of fairy tales by reading a number of well-known classics as well as their contemporary retellings, and we will guide our inquiries with a number of open-ended questions. Have fairy tales helped to shape Western social norms, or have they merely reflected the unspoken rules by which we tend to abide (or both?) What agendas do different authors bring to their fairy tale retellings, and how do different readers receive these texts? What aspects of fairy tales seem to have commonly accepted interpretations, and how have these symbols achieved their universality? Over the course of the semester, we will hone our reading, writing, and critical thinking skills, while also becoming experts in the emerging field of Fairy Tale Studies.

**Catalyst 110: Reforming Schools in the USA (Nichols)**

School’s out in for the summer! Year-round schooling, homework debates, the charter school movement, high-stakes testing, common core standards, integrating technology, cutting recess and the arts, cost-effective cafeteria menus, addressing poverty and racial disparities, redistricting, bullying initiatives… Fixing public schools in the United States is complicated and contentious. Stakeholders in communities, governments, and businesses argue over which solutions would best serve our nation’s youths. In this course, we will analyze opposing viewpoints regarding current schooling problems and recommended education reform. Our goal will not be to pick a side in these debates. Instead, we will develop and articulate the gray areas that live between polarizing positions. We will investigate contemporary issues in education using books, articles, media (film/TV/music), and online sources.

**Catalyst 110: Vices and Virtues (Truesdell)**

In literature, in politics, in life generally, we root for the “good guys” and despise the “bad guys.” But how do we distinguish one from the other? Usually, by identifying those who share our notions of good and evil and act in ways we think are virtuous, not vicious. This course explores the foundations of vice and virtue. We will pay particular attention to texts where ideas of virtue or vice are in conflict, whether in myth and fairy tale, political documents or essays, or in fiction by authors including Faulkner, Arthur C. Clarke, LeGuin, Camus and Shakespeare. Students will analyze these and other texts, using a variety of compositional modes, as part of the attempt to clarify their understanding of these issues.
Catalyst 120: Cosmic Detectives: What We Know About the Universe and How We Know It (Simon)

We know a lot about how the universe works. Have you ever wondered how we learn about the inner workings of a proton or what the universe was like seconds after the Big Bang? From the smallest scales to the largest, physicists use a variety of ingenious techniques to learn about the universe in which we live. In this class, you will study a variety of indirect detection techniques involved in discoveries ranging from water on Mars to planets beyond our solar system; from gravitational waves to the expansion of the universe. Through a series of simple experiments, you will investigate several recent advancements in cosmology, astrophysics and particle physics.

Catalyst 120: The Global Economy by the Numbers (Mahoney)

Economic globalization is a controversial issue with real-world consequences: cheap consumer goods and booming foreign trade opportunities, but also the loss of good-paying jobs (including office jobs as well as factory jobs) in rich countries like the United States. What can numbers tell us about the impact of globalization on the U.S. economy and on other economies throughout the world? Is one country’s loss another country’s gain, or does everybody come out ahead? Is the United States in economic decline? Is the gap between rich countries and poor countries widening or narrowing? Is immigration good or bad economically? And what effect has the environment had on the global economy? Is overpopulation leading to poverty? Are we running out of oil and other natural resources?

Catalyst 120: Truth or Lies: Unwrapping the “Facts” We Encounter (Schatzinger)

How do we distinguish between reliable data and distortions, half-truths, and outright lies? What steps can we take to better evaluate empirical claims, news, and reports? This course will provide you with a number of tools on how to detect mishandled statistics, graphs and faulty arguments. It also wrestles with the limitations of determining whether something is true or false and we explore how randomness and probability affect our lives. Lastly, this course will give students practical tools on how to organize data and create visual representations of data.

Catalyst 120: The World is Going to Hell (Hatcher)

Or is it? Are humans becoming more or less violent over time? How would we know? Human violence is, according to the news, a simple fact of life, yet the question of whether we are becoming more or less violent over time is one that is not simple to answer. This course will explore various types of violent behavior over the last several hundred years and, in doing so, will ask important questions concerning the selection, measurement, and interpretation of relevant data. Critical thinking and the objective analysis of data will be emphasized, but we will also talk about the psychological factors that are important when confronting one’s own opinions and theories with data that may or may not support them.

Catalyst 120: Mathematical Discourse in Everyday Life (Scott)
This course centers on the construction and presentation of valid arguments, both written and oral, particularly those relying on quantitative data. Students will improve at constructing such arguments both through direct practice and by learning to recognize many common flaws in the arguments of others. Hunting grounds for dubious data and argumentation will be found in the media; the role of chance and how to make wise decisions in life will supply the mathematical topics. For example, how do we measure risk, and how might this affect public policy? How can we evaluate competing claims about topics in the news? When does mathematics actually answer questions, and when does it just illuminate the gray areas? Specific skills developed will include proportional reasoning and the use of spreadsheets, but no special prior knowledge is expected.

Catalyst 120: The Air in Beijing, The Water in Flint, and The Temperature in Ripon (Byron)

No one wants to breathe contaminated air nor drink polluted water but how do we evaluate what our levels of unsafe chemical exposure are or could be? This course develops quantitative assessment and communication skills associated with measurement and discussion of air and water pollution and the strategies employed to minimize personal exposure. The discussion will expand into a quantitative look at the chemistry of climate change and the use of fossil fuels and the strategies for minimizing imbalances in atmospheric composition. No previous chemistry background is required.

Catalyst 120: First Year Facts or Fiction? (Khan)

As an incoming freshman student you may have a few questions. Will I gain the ‘Freshman 15’? Do I have the study skills to succeed in college? How will I balance my social life and study demands? Which major is the best for my future? Additional questions will be addressed according to class interests. We will explore these questions using quantitative evidence, some of which will collect ourselves, and draw conclusions using quantitative reasoning.