### **HISTORY**

Since the College's first commencement in 1821, Allegheny students have showcased their exceptional academic achievements through a senior capstone experience of one kind or another. At times it involved an oral defense, at others a written thesis. The notion of a written Senior Project coupled with a comprehensive oral examination first appeared in the 1942 College Catalogue. In the 1970s, oral examinations shifted from a general defense of disciplinary expertise to a more focused verbal presentation of the Senior Project findings.

#### **PREPARATION**

The Senior Project provides students with an opportunity to integrate discipline-specific scholarship with the communication and research skills necessary for professionals in the 21st century. During their first year at Allegheny, students write, speak, and research frequently in their first-year seminars. By the sophomore year they are ready to undertake the complexities of writing and speaking in a specific discipline. They further hone these disciplinary communication skills in a junior seminar, the final preparatory phase for the Senior Project. By the senior year students are sufficiently prepared to undertake a scholarly endeavor approximating those experiences they will face as professionals in their field.

### REALIZATION

The culminating experiences of the Senior Project are as varied as the disciplines that produce them, from recitals, performances, and exhibits to written and oral presentations on laboratory research. Many illustrate unusual combinations of disciplines, interests and skills. The Senior Project Celebration offers an open forum for students to present their projects, allowing seniors to refine their skills in presenting to a broad audience and share ideas with other students and the campus community.

# ALLEGHENY COLLEGE

The national liberal arts college where 2,100 students with unusual combinations of interests, skills and talents excel.

# SENIOR PROJECT CELEBRATION

In keeping with Allegheny's commitment to provide students with a liberal arts education of high standards, the Senior Project is not a mere report or semester paper, but a significant piece of independent study, research or creative work conducted under the supervision of one or more faculty members. The outcome of a Senior Project is more than a grade or a written document; for the student it often results in a new way of looking at complex problems and inspires an appreciation for the power of ideas that might previously have seemed like abstract concepts in a textbook. Often it can be a pivotal moment when a student realizes his or her own abilities and potential.



### Poster Presentations

ALL POSTER PRESENTATIONS WILL BE IN THE LOBBY OF THE HENDERSON CAMPUS CENTER.

### 10:00 AM - NOON

#### Sahar Arbab

Green Deeds in the Mead: An Environmental Education Program for Lower-Income Youth in Meadville, PA

Major: Environmental Studies / Minor: English Project Advisors: Thomas Eatmon and Eric Palmer

#### Lauren Bader

And so, to Bath: Jane Austen and the Historic City of Bath, Site for Health, Entertainment and Character Development

Major: English / Minor: History

Project Advisors: Diane D'Amico and Susan Slote

### **Douglas Barber**

Implications for Tectonic Control on Paleogeography and Sediment Dispersal Pathway: Integrated U-Pb Detrital Zircon Age-Analysis of the Paleogene Missouri River Headwater System, SW Montana

Major: Geology / Minor: Economics Project Advisor: Bob Schwartz

### **Sarah Barlow**

### Twentieth Century War and Liberal Arts Education at Allegheny College

Major: History / Minor: Art History and Computer Science Project Advisor: Ian Binnington

#### **Matthew Bocchi**

### Courtesans of Venice: Social Fluidity in the Time of the Renaissance

Majors: Art History, History, and Women's Studies Project Advisors: Amelia Carr, Barbara Shaw, and Paula Treckel

### **Natalie Cappellazzo**

### The Implications of Resource Wealth for Human Development Outcomes

Major: Political Science / Minor: English

Project Advisors: Shannan Mattiace and Shanna Kirschner

### **Jordyn Chartier**

### La Lengua Porteña: A Historical Linguistic Perspective

Major: International Studies / Minor: Spanish and Chinese

Project Advisor: Shannan Mattiace

### **Kathryn Cragg**

### An Unwanted Kiss, An Unwanted Lie

Major: Communication Arts / Minor: Political Science and Writing Project Advisors: River Branch and Michael Keeley

### **Nicholas Diana**

### The Effect of Sex and Priming on Inattentional Blindness to Sexist Stimuli

Majors: Psychology and Neuroscience Project Advisor: Aimee Knupsky

#### **Abby Dishler**

### Determination of the Secondary Structure of Group II Bulges Using the Fluorescent Probe 2-Aminopurine

Major: Biochemistry / Minor: History Project Advisor: Martin Serra

### **Eric Engelhardt**

### Using IOZone to Measure the Cost of Using Hard Disk and Solid State Drives

Major: Computer Science / Minor: Music Project Advisor: Gregory Kapfhammer

#### **Colleen Friel**

#### **Auxin Effects on Root Exudation**

Major: Biochemistry / Minor: Economics Project Advisor: Catharina Coenen

#### **Caitlyn Fuoco**

### Exploring the Current Shift in Fan/Producer Relationships

Major: Communication Arts / Minors: Psychology and Creative Writing Project Advisor: Ishita Sinha Roy

### **Kyle Greenberg**

### The Influence of Pogonotrophy on Male College Students' Perceived Masculinity

Major: Psychology / Minor: Communication Arts Project Advisors: Joshua Searle-White and Calion Lockridge

#### Alivia Haibach

### Crosses and Kofeyyes: Minority Integration Theory in Egypt

Major: International Studies / Minor: Religious Studies Project Advisor: Shanna Kirschner

### **Brennan Hamilton**

### The Meeting of Heaven and Earth: The Lay Construction of Seville's Holy Week

Majors: Spanish and History

Project Advisors: Teresa Herrera and Kale Haywood

### **John Hecht**

# The Effect of Benzalkonium Chloride Residues on Adhesion and Biofilm Formation by Wild-Type and Benzalkonium Chloride-adapted Haemophilus ducreyi

Major: Biology / Minor: English Project Advisor: Tricia Humphreys

### **Max Hennessy**

### Determining the Roles of innexin2 and 5 in the Drosophila Melanogaster Immune System

Major: Biology / Minor: Economics Project Advisor: Bradley Hersh

### **Ashley Jones**

### Illustrating High School Mathematics Using Origami

Major: Mathematics / Minor: Psychology Project Advisor: Tamara Lakins

### **Abigail Kmiecinski**

June 16, 1976: The Intersection of Liberation, Education, and a Powerful Young Generation in Soweto, South Africa

Major: History / Minors: French and Psychology Project Advisor: Barry Shapiro

### **Charley Larkin**

### What is "Right"? How Do You Define "Right"? How about "Left"?

Major: Art and Technology / Minor: Psychology Project Advisor: Sue Buck

#### **Ashley Lehr**

### Restaurant Industry Strategy: Exploiting Demographic Change in a Weak Economy

Majors: Economics and Spanish

Project Advisors: Don Goldstein and Teresa Herrera

### Jiarong Li

# Examination of Keynesian Economics in the Case of Sino-German Economic Relations after the Global Financial Crisis in 2008

Majors: International Studies and German / Minor: Economics Project Advisors: Sharon Wesoky, Jochen Richter, and Jialu Liu

### **Chelsea Litman**

### Past, Present, Future: The Enduring Influence of Marcel Duchamp's *Fountain* in Art

Major: Art History / Minor: French Studies Project Advisor: Richard Schindler

### **Annie Maglione**

### The Effect of Creative Drama on Children's Self-Efficacy for Peer Interaction

Majors: Psychology and Communication Arts/Theatre Project Advisors: Deb Dickey and Beth Watkins

#### **Daniel Marcus**

### The History of Culture and Politics in the NBA

Major: History / Minors: Economics and Communication Arts Project Advisor: Frank Forts

### **Colleen McCaughey**

### From Chorus Girl to Leading Lady: A Political Actor's Journey through American Musical Theatre

Majors: Theatre and Political Science Project Advisor: Dan Crozier

### **Kelsey McNary**

### Recommended Surface Casing Depths to Help Prevent Groundwater Contamination from Hydraulic Fracturing in Western Crawford County, Pennsylvania

Major: Environmental Studies / Minor: Geology Project Advisors: Rachel O'Brien and Chris Shaffer

#### **Alexandra Miller**

### The Automobile Industry: Strategies for New Entrants

Major: Economics / Minor: Studio Art Project Advisor: Stephen Onyeiwu

### **Amy Ochsenreiter**

### A Green Roofing Material for Historic Bentley Hall

Major: Environmental Science / Minor: History

Project Advisors: Eric Pallant, Richard Bowden, and President James Mullen

### Mike Oliphant A World Set Apart

Major: English / Minor: Psychology Project Advisor: Christopher Bakken

### Sara Polito

### The Effects of Propentofylline on Fetal Tissue Graft Survival and Integration in the Unilateral 6-Hydroxydopamine Rat Model of Parkinson's Disease

Majors: Neuroscience and Psychology Project Advisors: Jeff Cross and Jeff Hollerman

### **Brittany Rauzan**

### Functionalization of Polymers Using Cyano Biphenyl Derivatives with Application for Solar Cells

Major: Chemistry / Minor: Psychology Project Advisor: David Statman

### **Benjamin Schwartz**

### A Story of Leverage: Cyclical Patterns in Consumer Credit Growth

Major: Economics / Minor: Religious Studies Project Advisors: Stephen Casler and Tomas Nonnenmacher

### **Anna Shrier**

### **Waiting for Paint to Dry**

Major: Studio Art / Minor: Geology Project Advisor: Sue Buck

### **Zachary Silberman**

### V1309 Sco: A Cosmic Lighthouse Showing Astronomers the Way

Major: Physics / Minor: Classical Studies Project Advisor: Jamie Lombardi

### **Kelly Smith**

### The Effects of Conus Textile Venom on the BK Channel. hSlo1.1

Major: Neuroscience / Minor: Religious Studies

Project Advisor: Lauren French

#### **Keiron Stoddart**

### **EPR Studies on the Spin Crossover Characteristics of Trigonal Bipyramidal Metal Clusters**

Major: Physics / Minor: Economics Project Advisor: Doros Petasis

### **Trista Sykes**

### Classically-Conditioning Immunity in Sprague-Dawley Rats

Major: Psychology / Minor: Religious Studies

Project Advisor: Rodney Clark

#### **Jillian Tavares**

### Red Shoes, Revisited: Exploring Confessional Poetry and Feminist Consciousness-Raising

Majors: English and Women's Studies

Project Advisors: Barbara Shaw and Christopher Bakken

#### **Laura Thorn**

### Not Really a Refugee: A Constructivist Perspective on Changing Forced Migration Norms

Major: Political Science / Minor: German Project Advisor: Shanna Kirschner

#### **Michael Vlah**

### Role of Caddisflies in Liberating Detritus-bound Nutrients and Energy to Food Webs in Temporary Alpine Ponds

Major: Biology / Minor: Environmental Writing

Project Advisor: Scott Wissinger

### **Anulekha Venkatram**

### From Self to Sisterhood—The Palace of Illusions as an Empowering Revision for Hindu Women

Major: English / Minors: Spanish and Economics

Project Advisor: Lloyd Michaels

### **Amanda Woodside**

### Have a Left Frontal Day: Coffee, Depression, and EEG

Major: Neuroscience / Minor: Dance and Movement Studies

Project Advisor: Sarah Conklin

### **Anna Zimmerman**

# The Subsidy-Stress Response of Fish Indices of Biotic Integrity (IBIs) to Land Cover for Streams of Northwestern Pennsylvania

Major: Biology / Minor: Psychology Project Advisor: Scott Wissinger