

**Drew University**  
**SummerTerm 2019 Course List**  
**drew.edu/summer**

Last updated 5-17-19



**SAVE with reduced tuition.**

**EARN college credits.**

**EXPLORE Wall Street.**

**STUDY in Ireland.**

**GET 4 or 8 credits closer to graduation.**

# Drew University

Drew University is a fully accredited independent institution of higher learning. We offer programs of the highest academic standards in the liberal arts. Located on an idyllic wooded campus in Madison, New Jersey – just 29 miles west of New York City, Drew is known for inspired teaching, individualized experiences and educational excellence.

SummerTerm courses are intended for Drew's college students as well as visiting students from other colleges and universities. Academically talented rising high school juniors and seniors are invited to attend introductory- or intermediate-level courses at Drew for college level credit.

## DATES

### Session I\*

Monday, May 20 – Friday, June 28, 2019

No classes on Memorial Day, Monday, May 27, 2019

### Session II\*

Monday, July 1 – Friday, August 9, 2019

No classes on Independence Day, Thursday, July 4, 2019

*\*Courses may run for less than six week within each session. Please review course details for additional information on dates, times and class duration.*

### Applications Being Accepted

<http://www.drew.edu/summer-term/summerterm/admissions/>

### Registration Begins

Monday, March 11, 2019

## TUITION AND FEES

### Tuition

\$745 per credit (unless otherwise noted)

\$2,980 per 4-credit course

\$5,960 per 8-credit course

### Fees

Application Fee: \$25 (non-refundable)

Lab/Studio Course Fees: Required for some courses. See course description for details.

Parking Fee: \$50

Transcript Fee: \$25 (one-time fee)

### Financial Assistance

Financial assistance is not available for SummerTerm classes.

## REGISTRATION PROCESS

### Drew Students

Register via TreeHouse Self-Service. Most summer courses run on an open enrollment basis therefore a Pin number will not be required to register. It is recommended that you consult with your academic advisor before making your course selections.

### Visiting Students

Visiting students must be in good academic standing at their home school and have successfully met all course prerequisites in order to enroll. It is the responsibility of visiting students to secure approval from their home schools before registering for summer classes. Drew cannot guarantee that a course will be transferable but will do their best to provide you with course syllabi to assist with this process.

# TO REGISTER

1. Submit your application by clicking the green “REGISTER/APPLY FOR CLASSES” link under the Opportunities for College Students section of the SummerTerm webpage: <http://www.drew.edu/summer-term/>
2. Once your application has been processed, you will receive an email from the Registrar’s Office notifying you of your Drew Identification Number. You will also receive an email from University Technology asking you to activate your Drew account. Activating your account will give you access to TreeHouse, the name of Drew’s student portal online. Access to TreeHouse is required in order to:
  - a) **Register for classes** by clicking on “Add or Drop Classes” under the “Registrar” heading. Please review the [Registration Instructional Video](#) for further assistance with the registration process. Keep in mind, pin numbers are not required to register for summer classes.
  - b) **Classes with prerequisites** that were not completed at Drew, will require you to complete a [Registration Agreement](#). The Registrar’s Office will manually process your request upon receipt of your completed Registration Agreement.
  - c) **Complete health forms** by clicking on “MyHealthPortal” under the “Help and Services” heading (required of all students attending summer classes).
  - d) **View your statement of charges** (SummerTerm billing will take place at the end of April). Payment is due before classes begin.
  - e) **Register your car for a parking pass** by clicking on “MyParking” under “Vehicles on Campus” if you plan on parking on campus.

## BILLING

### PAPERLESS BILLING

Please note that billing statements for summer tuition and fees are only available in electronic form. Paper billing statements will not be mailed to home addresses. Students can access their electronic billing statement through TreeHouse, their Drew student portal online at the end of April. For additional information regarding billing, contact Student Accounts at 973-408-3114 or [studentaccounts@drew.edu](mailto:studentaccounts@drew.edu). Student Accounts is located in Holloway Hall (be aware they will be moving to Brothers College at some point this summer so it is best to call before visiting them).

### PAYMENT

Payment is due in full *before* the start of summer classes. Visit [Payment Options](#) for additional information.

**Cash Payment:** must be presented in the Student Accounts Office in person.

**Check or Money Order:** may be presented in the Student Accounts Office or mailed to the payment address below:

Drew University  
Attn: Student Accounts  
36 Madison Avenue  
Madison, NJ 07940

**Credit/Debit Card Payments:** may be authorized using an approved card through the TMS One-Time Payment Gateway which can be accessed from TreeHouse (attaches your account to the transaction) or by following the link below (you must enter your student account information). There is a convenience fee of 2.99% associated with making a student account payment using a credit/debit card and is based on the amount being paid (minimum fee is \$1.00). [www.drew.edu/payments](http://www.drew.edu/payments) (click on "Student Account Payments" in the black box at the bottom of the page).

**E-check from Checking or Savings Account:** Student Account and DrewCard Payments may be authorized to be taken directly from your bank checking or savings account through TMS One-Time Payment Gateway (routing and account numbers required). There is no fee associated with this payment method (regardless of payment amount) for use of the automated self-service method. There is a \$10 fee if the payer chooses to speak with a TMS representative to make their payment.

**Payment questions?** Contact Student Accounts at 973-408-3114 or [studentaccounts@drew.edu](mailto:studentaccounts@drew.edu).

# REFUND POLICY

The \$25 application fee is non-refundable except in cases when Drew University cancels an undergraduate course.

## **Institutional Refund Policies**

SummerTerm refund is based upon the date of withdrawal (by emailing [regist@drew.edu](mailto:regist@drew.edu) and [summer@drew.edu](mailto:summer@drew.edu)).  
<http://www.drew.edu/fba/students-parents/institutional-refund-policies/>

## **Standard Schedule Classes**

For any four- to six-week summer classes, the deadline for full tuition refunds is the Tuesday of the first week of classes; the deadline for a 50 percent refund is the Thursday of the first week of classes. No refunds will be issued after the Thursday of the first week of classes. The \$25 application fee is non-refundable.

## **Intensive Schedule Classes**

Any classes meeting for fewer than four calendar weeks is considered an intensive class. The withdrawal policy for such courses is as follows:

- Before the start of the class – 100% refund less the application fee
- After the day of the first class meeting and before the second class meeting – 50% refund less the application fee
- After the day of the second class meeting starts – 0% refund.

# COURSE CANCELLATIONS

The university reserves the right to cancel courses. Should a course not meet sufficient enrollment, registered students will be notified prior to the start of that course. Students registered for a canceled course may transfer to another course or receive a full tuition refund. If you have any questions regarding the status of your summer course, please call the Office of Continuing Education at 973-408-3400.

# ADDITIONAL INFORMATION

## **DISABILITY SERVICES**

The Office of Accessibility Resources determines eligibility services for students with disabilities. All students with documented disabilities are encouraged to register with the Office of Academic Services as soon as possible. Services cannot be provided until students officially register and documentation meeting the university standards is submitted and approved. There are no retroactive accommodations. Students with disabilities should review the website below.

<http://www.drew.edu/academicservices/disabilityservices>

Questions? Contact Dana Giroux at 973-408-3962 or [dgiroux@drew.edu](mailto:dgiroux@drew.edu)

## **HOUSING**

On-campus housing is available to college students during the summer. Interested students must complete the on-line Summer Housing application at the link below.

<https://www.drew.edu/reslife/summer-housing-information>

Questions? Contact Robert Meade at 973-408-3681 or [rmeade@drew.edu](mailto:rmeade@drew.edu).

## **SUMMER I.D. CARDS**

Students new to Drew who have registered and paid all fees may obtain their Drew Identification Card at the Student Accounts Office, located on the first floor of Holloway Hall. A Drew Identification Card is necessary in order to secure a parking pass and to borrow books from the Drew library.

## **PARKING PERMITS**

Parking permits are required for students who will be driving to campus. The permit may be obtained at Pepin Services Center (at the cost of \$50 which will be charged to the student's account). Academic year stickers are valid through the summer for Drew students.

Before a summer parking permit can be issued, students must pay their bill in full and obtain a Drew Identification Card. They will then need to register their cars through TreeHouse under the "Vehicles on Campus" heading by clicking on "MyParking."

After registering online, students will be required to park the car they intend to drive outside Pepin Service Center and provide the following documents for review:

- Drew Student Identification Card
- Driver's License
- Vehicle Registration
- Insurance

## COURSE DETAILS

**Course particulars and room assignments are subject to change. For the most up-to-date information, please visit the Registrar's Summer Term 2019 Course List at the link below:**  
<http://www.drew.edu/registrar/catalog>

## TRANSCRIPTS

The permanent records of students who are enrolled for credit are maintained by the Office of the Registrar. Summer course credits and grades for students who are matriculated at Drew are automatically added to their academic record.

For visiting students, transcript will be mailed to another institution **upon request by the attending student**. Visit the following link for additional information on the transcript request process:

<http://www.drew.edu/registrar/student/transcript-requests>

## Credit Courses for High School Students

- Rising high school juniors and seniors may apply to attend introductory level college credits for academic credit. The application involves submitting an application online at [drew.edu/summer](http://drew.edu/summer). In addition to the application online, students must submit the following:
  - Official High School Transcript
  - Letter of Recommendation from Teacher
  - Letter of Recommendation from Guidance Counselor
  - \$25 Application Fee (you will be billed for this)
- Application materials should be mailed to: Sunita Bhargava, Office of Continuing Education, Drew University, 36 Madison Avenue, Madison, NJ 07940. Letters of recommendation can be sent directly to Sunita Bhargava, Director of Transfer and Continuing Education at [sbhargav@drew.edu](mailto:sbhargav@drew.edu) if sent directly by your recommender.
- High school students pay a reduced \$500 per credit tuition for on-campus courses (this rate does not apply to the study abroad Global Perspectives course. The Wall Street Summer Program is not open to high school students.
- If you are interested in attending an intermediate level or upper level courses, please contact the Office of Continuing Education at [summer@drew.edu](mailto:summer@drew.edu) or 973-408-3400 to see if special permission can be granted.

**Questions? Please contact the Office of Continuing Education at 973-408-3400 or [summer@drew.edu](mailto:summer@drew.edu).**

## COURSE OFFERINGS BY SESSION

*Please note: some of the classes listed on the Registrar's course list online are not open to visiting students, such as EAP, EDUC, EOS and off-campus programs abroad. The pre-college program in Ireland is open to visiting students.*

### Session I

- ANTH 104 – A (40001) Cultural Diversity: Cultural Anthropology and Linguistics
- ART 104 – A (40004) Digital Design
- ART 130 – A (40134) Photography I
- ART 220 – A (40005) Digital Video
- BIOL 256 – A (40007) Anatomy and Physiology I with lab BIOL 256L - A (40008)
- BIOL 302 – A (40012) Geographic Information Systems
- ~~BIOL 360 – A (40011) Molecular Biology of Cancer~~
- BST 115 – A (40013) Fundamentals of Financial Accounting

- CHEM 160 – A (40014) Principles of Chemistry II with lab CHEM 160L – A (40016)
- CHEM 160A – A (40015) Principles of Chemistry II (Lecture Only Section)
- CHEM 250 – A (40017) Organic Chemistry I with lab CHEM 250L – A (40019)
- CHEM 250A – A (40018) Organic Chemistry I (Lecture Only Section)
- CSCI 150 – A (40023) Introduction to Computer Science in Python - ONLINE
- CSCI 151 – A (40029) Object Oriented Programming in Java
- CSCI 230 – A (40024) Data Structures - ONLINE
- CSCI 290 – A (40025) Introduction to Topics in Computer Science: Web Development and Digital Media
- ECON 102 – A (40038) Economic Principles: Macroeconomics
- EDUC 315 – A (40154) Education Policy & Legal Issues
- ENGH 121 – A (40048) Introduction to Media Studies
- ENGH 201 – A (40042) Intermediate Selected Topics in Literature: 20<sup>th</sup> Century Western Short Story
- ~~ENGH 201 – AI (40041) Intermediate Selected Topics in Literature: 20<sup>th</sup> Century American Poetry~~
- ENGH 230 – A (40043) Topics in Creative Writing Workshop: Poetry and Fiction
- ENGH 322 – A (40108) Thinking about Genre through Film
- ~~ENGH 330 – A (40044) Creative Nonfiction Workshop~~
- ENV 302 – A (40049) Geographic Information Systems
- FILM 322 – A (40170) Thinking of Genre through Film
- ~~FREN 102 – A (40050) Fundamental of Oral and Written French II~~
- ~~FREN 201 – A (40051) Intermediate French~~
- ~~LAST 101 – A (40173) Societies of Latin America and the Caribbean~~
- MATH 117 – A (40052) Introductory Statistics
- MATH 150 – A (40056) Calculus and Analytic Geometry I
- MCOM 101 – A (40060) Introduction to Media Studies
- PHIL 214 – A (40063) Business Ethics
- PHIL 330 – A (40064) Philosophy of Law
- PHYS 111 – A (40065) Introduction to Physics I with lab PHYS 113 – A (40066)
- PSCI 104 – A (40136) International Relations
- ~~PSYC 101 – A (40069) Introduction to Psychology~~
- PSYC 342 – A (40071) Social Psychology
- SOC 101 – A (40072) Introduction to Sociology
- SPAN 101 – A (40073) Fundamentals of Oral and Written Spanish I
- SPAN 201 – A (40074) Intermediate Spanish

## Session II

- ART 106 – B (40002) Drawing I
- ART 130 – B (40006) Photography I
- ART 160 – B (40003) Painting I
- BIOL 258 – B (40009) Anatomy and Physiology II with lab BIOL 258L – B (40010)
- CHEM 350 – B (40020) Organic Chemistry II with lab CHEM 350L – B (40022)
- CHEM 350A – B (40021) Organic Chemistry II (Lecture Only Section)
- CSCI 149 – B (40026) Introduction to Computer Science in JavaScript
- CSCI 150 – B (40027) Introduction to Computer Science in Python
- CSCI 151 – B (40030) Object Oriented Programming in Java
- CSCI 260 – B (40031) Computer Systems & Architecture
- ECON 102 – B (40039) Economic Principles: Macroeconomics
- ENGH 201 – AB (40047) Intermediate Selected Topics in Literature: Young Adult Fiction
- ENGH 232 – B (40045) Food Writing
- HUM 197 – X (40137) Global Perspectives through an interdisciplinary study of Irish History and Culture
- MATH 001 – B (40054) Preparation for Calculus
- MATH 117 – B (40053) Introductory Statistics
- MATH 150 – B (40057) Calculus and Analytic Geometry I
- MATH 151 – B (40055) Calculus and Analytic Geometry II
- MATH 250 – B (40059) Calculus and Analytic Geometry III
- MCOM 203 – B (40061) Forms: Special Topics in Media – Forms: Propaganda

- NEUR 101 – B (40062) Introduction to Neuroscience
- PHYS 112 – B (40067) Introductory Physics II with lab PHYS 114 – B (40068)
- PSYC 101 – B (40070) Introduction to Psychology
- SPAN 102 – B (40075) Fundamentals of Oral and Written Spanish II
- THEA 386 – B (40076) Theatre in the Community: The Newark Collaboration

## Wall Street Summer

- ECON 281 – X 1 (40040) Wall Street and the Economy (off-campus)
- ECON 281 – X (40138) Wall Street and the Economy (off-campus)

## SummerTerm Course Details

### Session I

#### **Cultural Diversity: Cultural Anthropology and Linguistics – 40001 – ANTH 104 – A**

**4 credits.** A comparative examination of the cultural diversity of humanity. Using case studies of peoples in differing contexts, the course presents theories and data on a range of topics for understanding contemporary human conditions, including subsistence strategies, political and economic systems, religion and expressive behavior, language, culture change, and the interdependence of cultures throughout the planet.

**GenEd.:** CLA-Breadth/Social Science,  
CLA-Diversity International

**Instructor:** Prof. Allan Dawson

**Dates:** May 20 – June 21 (5 weeks)

**Times:** 10:00 a.m. – 12:30 p.m.

**Days:** M, T, W, TH

**Room:** Brothers College 218

#### **Digital Design – 40004 - ART 104 – A**

**4 credits.** An introduction to the visual elements that constitute the basic issues of design. Primary goals are the development of technical and critical skills as they apply to digital design. Investigates aspects of color, line, form, texture, and space through workshops and outside assignments. The foundation course for the intermediate- and upper-level studio courses.

**GenEd.:** CLA-Breadth/Arts

**Instructor:** Prof. Janne Hoeltermann

**Course Fee:** \$130.00

**Dates:** May 20 – June 13 (4 weeks)

**Times:** 9:00 a.m. – 12:30 p.m.

**Days:** T, W, TH

**Room:** Dorothy Young Center for Arts 102

#### **Photography I – 40134 – ART 130 – A**

**4 credits.** An introduction to the fundamentals of photographing with digital SLR cameras, along with using a range of digital imaging editing tools and output modes to produce original work. Students are encouraged to make pictures that are challenging in both content and form and express the complex and poetic nature of human experience. The course introduces the work of influential photographers, raises discussions of

contemporary issues in the medium and provides tools for evaluating and expressing a photograph's communicative effectiveness. Students must provide a fully manual digital SLR camera and budget for printing costs and other supplies.

**GenEd.:** CLA-Breadth/Arts

**Course Fee:** \$125

**Instructor:** Prof. Danna Singer

**Dates:** May 20 – June 13 (4 weeks)

**Times:** 1:00 p.m. – 4:30 p.m.

**Days:** T, W, TH

**Room:** Brothers College 18

#### **Digital Video – 40005 – ART 220 - A**

**4 credits.** Introduces digital video as a creative tool and offers a technical understanding of the video camera and non-linear editing. Students will learn to manipulate time, space and sound to create sequential, narrative and experimental works. Projects explore both formal and conceptual issues integral to the history of video and filmmaking.

**GenEd:** CLA – Breadth/Arts

**Course Fee:** \$60

**Instructor:** Prof. Janne Hoeltermann

**Dates:** May 20 – June 13 (4 weeks)

**Times:** 1:00 p.m. – 4:30 p.m.

**Days:** T, W, TH

**Room:** Dorothy Young Center for Arts 102

#### **Anatomy and Physiology I – 40007 – BIOL 256 – A**

**4 credits.** The first of a two-course sequence examining the structure and function of specific biological systems in vertebrate organisms, with a particular focus on mammals. Includes an overview of the evolution of organs and organ systems, system function at a biochemical and biophysical level, and the regulation and integration of multiple physiological systems within the whole organism. Primary focus will be on the integumentary system, the musculoskeletal system and the central nervous system. Laboratory will include the exploration of the dynamic function and regulation of



human physiological systems and the study of anatomy through the use of interactive digital resources in conjunction with dissection of animal specimens.

**Prerequisite:** [BIOL 160](#) and [CHEM 160](#)

**Corequisite:** Lab for Vertebrate Anatomy and Physiology I – 40008 – BIOL 256L – A

**Instructor:** Prof. Anthony Russo

**Dates:** May 20 – June 21 (5 weeks)

**Times:** 9:00 a.m. – 12:00 p.m.

**Days:** T, TH

**Room:** Hall of Sciences S139

**Lab for Vertebrate Anatomy and Physiology I – 40008 – BIOL 256L – A**

**Prerequisite:** [BIOL 160](#) and [CHEM 160](#)

**Corequisite:** Anatomy and Physiology I – 40007 – BIOL 256 – A

**Instructor:** Prof. Anthony Russo

**Dates:** May 20 – June 21 (5 weeks)

**Times:** 9:00 a.m. – 4:00 p.m.

**Days:** W

**Room:** Hall of Sciences S106

**Geographic Information Systems – 40012 – BIOL 302 – A**

**4 credits.** This course explores GIS (Geographic Information System) and related spatial analysis tools, which are used to elucidate the natural landscape and human modification of the earth's surface. Students will acquire cartographic, ArcGIS, and remote sensing skills through case studies and individual research investigations. Same as: [ESS 302](#).

**GenEd.:** CLA-Breadth/Interdisciplinary, CLA-Quantitative

**Instructor:** Prof. Lisa Jordan

**Dates:** May 20 – June 21 (5 weeks)

**Times:** 9:00 a.m. – 12:00 p.m.

**Days:** T, W, TH

**Room:** Brothers College 1

~~**Molecular Biology of Cancer – 40011 – BIOL 360 – A**~~

~~**4 credits.** To provide an in-depth examination of cancer at the molecular level. As a disease of the DNA, cancer can arise from disruption of multiple cellular pathways, particularly those that control cell cycle progression. This course will focus on the molecular basis of cancer, including the role of oncogenes and tumor suppression genes in the development of cancer; regulation of genomic stability; progression to a metastatic state, and the mechanism of action of clinically relevant cancer treatments.~~

~~**Pre-requisite:** C- or better in [BIOL 250](#).~~

~~**Instructor:** Prof. Stephen Dunaway~~

~~**Dates:** May 20 – June 21 (5 weeks)~~

~~**Times:** 9:00 a.m. – 11:30 p.m.~~

~~**Days:** T, W, TH~~

~~**Room:** TBD~~

**Fundamentals of Financial Accounting – 40013 – BST 115 – A**

**4 credits.** This introductory course exposes students to the accounting principles and practices used by decision-makers associated with a business or governmental entity. Major topics include the accounting cycle, preparation and analysis of financial statements, standards and procedures for assets and liabilities, and the roles of corporate communication and responsibilities with respect to the accounting process.

**Instructor:** Prof. Karen Crisonino

**Dates:** May 20 – June 28 (6 weeks)

**Times:** 9:20 a.m. – 12:30 p.m.

**Days:** T, TH

**Room:** Brothers College 117

**Principles of Chemistry II – 40014 – CHEM 160 – A**

**4 credits.** A continuation of [CHEM 150/CHEM 151](#) covering the structure of solids, kinetics, thermodynamics, equilibria, electrochemistry, and the principles of descriptive inorganic chemistry, including the transition metals.

**Pre-requisite:** C- or better in [CHEM 150/CHEM 151](#)

**Co-requisite:** Principles of Chemistry II Lab – 40016 - [CHEM 160L](#)

**GenEd.:** CLA-Breadth/Natural Science, CLA-Quantitative

**Instructor:** Prof. Jonathan Porras

**Dates:** May 20 – June 28 (6 weeks)

**Times:** 9:00 a.m. – 11:30 a.m.

**Days:** M, W, F

**Room:** Hall of Sciences S139

**Principles of Chemistry II – Without Lab (FOR VISITING STUDENTS ONLY) – 40015 – CHEM 160A – A**

**3 credits.** A continuation of [CHEM 150/CHEM 151](#) covering the structure of solids, kinetics, thermodynamics, equilibria, electrochemistry, and the principles of descriptive inorganic chemistry, including the transition metals.

**Pre-requisite:** C- or better in [CHEM 150/CHEM 151](#)

**GenEd.:** CLA-Breadth/Natural Science, CLA-Quantitative

**Instructor:** Prof. Jonathan Porras

**Dates:** May 20 – June 28 (6 weeks)

**Times:** 9:00 a.m. – 11:30 a.m.

**Days:** M, W, F

**Room:** Hall of Sciences S139

**Principles of Chemistry II Lab – 40016 – CHEM 160L – A**

**Pre-requisite:** C- or better in [CHEM 150/ CHEM 151](#); instructor permission required

**Co-requisite:** Principles of Chemistry II – 40014 – CHEM 160 A

**Instructor:** Prof. Mary-Ann Pearsall



**Lab Fee:** \$300  
**Dates:** May 20 – June 28 (6 weeks)  
**Times:** 8:40 a.m. – 11:40 a.m.  
**Days:** T, TH  
**Room:** Hall of Sciences S211

**Organic Chemistry I – 40017 – CHEM 250 – A**  
**4 credits.** A systematic survey of structure, nomenclature, and reactions of common functional groups and carbon compounds. Topics include stereochemistry, chirality, stereoisomerism, nucleophilic substitution and elimination, insertions, radical processes, oxidation-reduction and acid-base equilibria. Includes spectroscopic analysis. Discusses applications to systems of biological significance.

**Prerequisite:** C- or better in [CHEM 160](#) or permission of instructor

**Co-Requisite:** Organic Chemistry Lab – 40026 – CHEM 250L – A

**GenEd.:** CLA-Breadth/Natural Science  
**Instructor:** Prof. Kimberly Choquette  
**Dates:** May 20 – June 14 (4 weeks)  
**Times:** 8:30 a.m. – 11:30 a.m.  
**Days:** M, T, W, TH  
**Room:** Hall of Sciences S244

**Organic Chemistry I – Without Lab (FOR VISITING STUDENTS ONLY) – 40018 – CHEM 250A – A**

**3 credits.** A systematic survey of structure, nomenclature, and reactions of common functional groups and carbon compounds. Topics include stereochemistry, chirality, stereoisomerism, nucleophilic substitution and elimination, insertions, radical processes, oxidation-reduction and acid-base equilibria. Includes spectroscopic analysis. Discusses applications to systems of biological significance.

**Prerequisite:** C- or better in [CHEM 160](#) or permission of instructor

**GenEd.:** CLA-Breadth/Natural Science  
**Instructor:** Prof. Kimberly Choquette  
**Dates:** May 20 – June 14 (4 weeks)  
**Times:** 8:30 a.m. – 11:30 a.m.  
**Days:** M, T, W, TH  
**Room:** Hall of Sciences S244

**Organic Chemistry I Lab – 40019 – CHEM 250L – A**

**Prerequisite:** C- or better in [CHEM 160](#) or permission of instructor

**Co-requisite:** Organic Chemistry I – 40017 - [CHEM 250 - A](#)

**Instructor:** Professor Alan Rosan  
**Lab Fee:** \$300  
**Dates:** May 20 – June 14 (4 weeks)  
**Times:** 12:30 p.m. – 3:30 p.m.  
**Days:** M, T, W, TH  
**Room:** Hall of Sciences S226

**ONLINE: Introduction to Computer Science in Python – 40023 – CSCI 150 – A**

**4 credits.** How can we automatically solve problems using computers? By the end of this course, students should be able to implement solutions to solve basic computational problems using the Python programming language. Students will learn to design, implement, document and test programs, as well as learn to apply language concepts such as iteration, decision, user-defined functions, and lists. No previous programming experience is expected. Prospective computer science majors or minors should begin with this course which is also appropriate for students who wish to learn some programming but do not plan to take any additional computer science courses.

**GenEd:** CLA – Quantitative

**Instructor:** Prof. Emily Hill

**Location:** Online

**Object Oriented Programming in Java – 40029 – CSCI 151 – A**

**4 credits.** Designing, writing, and testing structured computer programs using Java. By the end of this course, students should be able to (1) decompose problems into actions and objects, (2) apply advanced programming constructs such as recursion and collections to implement solutions, (3) use inheritance to facilitate localized changes, (4) design & implement an event-driven application with a graphical user interface, and (5) take advantage of automated development tools.

**Prerequisite:** C- or better in [CSCI 149](#) or [CSCI 150](#), or [CSCI 117](#) or other prior programming experience

**GenEd:** CLA – Quantitative

**Instructor:** Diane Liporace

**Dates:** May 20 – June 21 (5 weeks)

**Times:** 1:00 p.m. – 3:45 p.m.

**Days:** M, W, TH

**Room:** Brothers College 21

**ONLINE: Data Structures – 40024 – CSCI 230 – A**

**4 credits.** Introduction to the study of abstract data types and the analysis of algorithms. Students will write programs using data structures such as linked lists, stacks, queues, multidimensional arrays, trees, and dictionaries. Students will explore advanced programming concepts such as recursion, Big O, sorting, and searching.

**Prerequisite:** C- or better in [CSCI 149](#), [CSCI 150](#), [CSCI 117](#), or [CSCI 151](#) or other prior programming experience

**Instructor:** Emily Hill

**Location:** Online

**Introductory Topics in Computer Science: Web Development and Digital Media – 40025 – CSCI 290 – A**

**4 credits.** A survey of technologies for developing web-based software, such as client-server programming, visual design and user experience, persistent data storage with databases, as well as critical investigations on the social and anthropological impacts of digital media.

**Prerequisite:** C- or better in [CSCI 149](#) or [CSCI 150](#) or [CSCI 117](#) or [CSCI 151](#) or other prior programming experience in any programming language.

**Instructor:** Prof. Emily Hill

**Dates:** May 20 – June 21 (5 weeks)

**Times:** 9:45 a.m. – 12:30 p.m.

**Days:** M, W, TH

**Room:** Brothers College 21

**Economic Principles: Macroeconomics – 40038 – ECON 102 – A**

**4 credits.** An introduction to basic macroeconomic analysis with special emphasis on problems of unemployment, inflation, and economic growth. Topics include national income determination; money, financial markets, and monetary policy; fiscal policy and the economic role of government; the United States and the world economy.

**GenEd:** CLA – Breadth/Social Science, CLA – Quantitative

**Instructor:** Prof. Bernard Smith

**Dates:** May 20 – June 21 (5 weeks)

**Times:** 10:45 a.m. – 12:45 p.m.

**Days:** M, T, W, TH

**Room:** Brothers College 120

**Wall Street and the Economy – 40040 – ECON 281 – X1**

**8 credits.** The operations and institutions of financial markets; their role in financing new investments, pensions, etc.; their impact on local, national, and global economies. The economic history and ethical dimensions of Wall Street and its relation to macroeconomic policy. Signature of instructor required for registration.

**Pre-requisite:** [ECON 101](#) and [ECON 102](#) and acceptance into the Wall Street Semester.

**GenEd.:** CLA-Off Campus Experience, Drew University Short Term Summer Program

**Instructor:** Prof. Marc Tomljanovich

**Dates:** May 28 – June 18 (3 weeks)

**Times:** 9:00 a.m. – 5:00 p.m.

**Days:** M, T, W, TH, F

**Location:** Downtown New York

**Wall Street and the Economy – 40138 – ECON 281 – X**

**8 credits.** The operations and institutions of financial markets; their role in financing new investments, pensions, etc.; their impact on local, national, and global economies. The economic history and ethical dimensions of Wall Street and its relation to macroeconomic policy. Signature of instructor required for registration.

**Pre-requisite:** [ECON 101](#) and [ECON 102](#) and acceptance into the Wall Street Semester.

**GenEd.:** CLA-Off Campus Experience, Drew University Short Term Summer Program

**Instructor:** Prof. Oleg Ivanets

**Dates:** June 24 – July 17 (3 weeks)

**Times:** 9:00 a.m. – 5:00 p.m.

**Days:** M, T, W, TH, F

**Location:** Downtown New York

**Education Policy & Legal Issues – 40154 – EDUC 315 – A**

**4 credits.**

**GenEd.:** CLA-Diversity US, CLA-Writing Intensive

**Instructor:** Prof. Patrick McGuinn

**Dates:** May 20 – July 28 (6 weeks)

**Times:** 4:00 p.m. – 6:30 p.m.

**Days:** T, TH

**Room:** Brothers College 216

**Introduction to Media Studies – 40048 – ENGH 121 – A**

**4 credits.** In Introduction to Media Studies we will discuss how messages are created and disseminated through various forms of media including, but certainly not limited to, television, social media networks, product advertisements, and political campaigns. Looking at issues of messaging through both historical and rhetorical lenses, we will attempt to better understand our complex relationship with media as both members of a media-soaked culture and scholars examining the constructs of this culture. How is it possible to look at this culture from a distance? Can we objectively evaluate established social structures (race, gender, politics, etc.) perpetuated (or, in some cases, even created) by media institutions as members of this culture? Just how ingrained into us are these various media platforms? Equivalent Courses: [MCOM 101](#).

**GenEd.:** CLA-Breadth/Interdisciplinary

**Instructor:** Prof. Jeremy Blatter

**Dates:** May 20 – July 28 (6 weeks)

**Times:** 10:00 a.m. – 12:15 p.m.

**Days:** T, W, TH

**Room:** Brothers College 118

**Intermediate Selected Topics in Literature: 20<sup>th</sup> Century Western Short Story – 40042 – ENGH 201-A**

**4 credits.** This course allows students to explore a special topic or area not regularly taught in the curriculum. Equivalent: [ENGL 201](#)

**GenEd:** CLA – Breadth/Humanities  
**Instructor:** Prof. Maximillian Orsini  
**Dates:** May 20 – June 28 (6 weeks)  
**Times:** 1:00 p.m. – 4:30 p.m.  
**Days:** T, TH  
**Room:** Brothers College 118

**Intermediate Selected Topics in Literature: 20<sup>th</sup> Century American Poetry – 40041 – ENGH 201-A1**

**4 credits.** This course allows students to explore a special topic or area not regularly taught in the curriculum. Equivalent: [ENGL 201](#)

**GenEd:** CLA – Breadth/Humanities  
**Instructor:** Prof. Maximillian Orsini  
**Dates:** May 20 – June 28 (6 weeks)  
**Times:** 9:00 a.m. – 12:30 p.m.  
**Days:** T, TH  
**Room:** TBD

**Topics in Creative Writing Workshop: Poetry and Fiction – 40043 – ENGH 230-A**

**4 credit.** A creative writing workshop in creative non-fiction, poetry, or fiction, that focus on a particular theme, sub-genre, or problem. Topics could include writing that engages with the public sphere; occasional poetry (poetry that is composed for a particular occasion or is meant to be delivered to a particular person); interart poetry that engages with the visual arts, music, or vocal performance; writing that engages with a particular place such as New York City or the Drew campus; writing that combines genres or works intertextually; writing that engages with new media. Equivalent: ENGL 213

**GenEd:** CLA – Writing Intensive  
**Instructor:** Prof. John McIntyre  
**Dates:** May 20 – June 28 (6 weeks)  
**Times:** 1:00 p.m. – 4:30 p.m.  
**Days:** M, TH  
**Room:** Brothers College 117

**Thinking about Genre through Film – 40108 – ENGH 322 – A**

**4 credits.** This course investigates the concept of genre in US Hollywood film. Looking at a range of genres, including western, film noir, screwball comedy, horror, and melodrama, the course pairs a classic example of the genre with a contemporary film that reinterprets it in order to consider how film genres function to direct our expectations as film viewers and structure our reading of

the films. All films will be screened in class. Same as FILM 322 – A.

**Instructor:** Prof. Hadi Gharabaghi  
**Dates:** May 27 – June 28 (5 weeks)  
**Times:** 4:00 p.m. – 8:00 p.m.  
**Days:** M, W  
**Room:** Dorothy Young Center for Arts 106

**Creative Non-Fiction Workshop – 40044 – ENGH 330-A**

**4 credits.** A workshop with round table editing sessions, offering writing and reading assignments in established and innovative nonfiction forms, this course emphasizes expressive writing—the personal and informational essay, autobiography and biography, the character sketch, vignette, narrative, and prose lyric.

**GenEd:** CLA – Writing Intensive  
**Instructor:** Prof. Andrea Chapin  
**Dates:** May 20 – June 21 (5 weeks)  
**Times:** 1:00 p.m. – 3:30 p.m.  
**Days:** T, W, TH  
**Room:** TBD

**Geographic Information Systems – 40049 – ENV 302 – A**

**4 credits.** This course explores GIS (Geographic Information System) and related spatial analysis tools, which are used to elucidate the natural landscape and human modification of the earth's surface. Students will acquire cartographic, ArcGIS, and remote sensing skills through case studies and individual research investigations. Same as: [ESS 302](#).

**GenEd.:** CLA-Breadth/Interdisciplinary, CLA-Quantitative  
**Instructor:** Prof. Lisa Jordan  
**Dates:** May 20 – June 21 (5 weeks)  
**Times:** 9:00 a.m. – 12:00 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 1

**Thinking about Genre through Film – 40170 – FILM 322 – A**

**4 credits.** This course investigates the concept of genre in US Hollywood film. Looking at a range of genres, including western, film noir, screwball comedy, horror, and melodrama, the course pairs a classic example of the genre with a contemporary film that reinterprets it in order to consider how film genres function to direct our expectations as film viewers and structure our reading of the films. All films will be screened in class. Same as ENGH 322 – A.

**Instructor:** Prof. Hadi Gharabaghi  
**Dates:** May 27 – June 28 (6 weeks)  
**Times:** 4:00 p.m. – 8:00 p.m.  
**Days:** M, W  
**Room:** Dorothy Young Center for Arts 106

**Fundamentals of Oral and Written French II—  
40050—FREN 102—A**

**4 credits.** French 102 is a continuation of [FREN 101](#) or the equivalent level. Designed for students who have already covered the basics of the French language, but have not yet been exposed to all tenses and other grammar fundamentals. Videos, culture readings, interactive practice in the classroom, oral written and computer-assisted activities.

**Prerequisite:** [FREN 101](#) or [FREN 181](#)

**Instructor:** Prof. Sophia Fortune

**Dates:** May 20—June 21 (5 weeks)

**Times:** 9:00 a.m.—12:30 p.m.

**Days:** M, W, F

**Room:** TBD

**Intermediate French—40051—FREN 201—A**

**4 credits.** A continuation of [FREN 102](#). Review of basic grammar; development of speaking, listening, reading, and writing skills through films, discussion, Francophone articles and literary texts, compositions, and computer-assisted activities. A prerequisite for [FREN 302](#) and [FREN 304](#).

**Prerequisite:** [FREN 102](#) or [FREN 182](#)

**Instructor:** Prof. Sophia Fortune

**Dates:** May 20—June 21 (5 weeks)

**Times:** 1:00 p.m.—4:30 p.m.

**Days:** M, W, F

**Room:** TBD

**Societies of Latin America and the Caribbean—  
40173—LAST 101—A**

**4 credits.** From Patagonia to the Rio Grande, from the Andean Altiplano to the Islands of the Antilles, Latin America and the Caribbean is a culturally heterogeneous and diverse region that is of vital economic, political and environmental importance to the hemisphere and globally. This course will serve as a survey of the cultural traditions and societies of Mexico, the Caribbean, and Central and South America as they have evolved since the 16th century with an emphasis on social change, political authority, the role of the state, race, ethnicity and gender.

**GenEd.:** CLA Breadth/Interdisciplinary,  
CLA Diversity International

**Instructor:** Prof. Carolina Arango Vargas

**Dates:** May 28—June 21 (4 weeks)

**Times:** 10:00 a.m.—12:30 p.m.

**Days:** M, T, W, TH

**Room:** TBD

**Introductory Statistics—40052—MATH 117—A**

**4 credits.** This course is designed to enable you to use statistics for data analysis and to understand the use of statistics in the media. The course makes use of SPSS, a widely-used statistics package for the computer. Course topics include graphical and tabular presentation of data,

measures of central tendency, dispersion, and shape, linear transformations of data, correlation, regression, basic probability and the normal probability model, sampling, t-tests, and one-way analysis of variance. Same as: MAT+861.

**GenEd.:** CLA-Quantitative

**Instructor:** Prof. Chris Apelian

**Dates:** May 20—June 21 (5 weeks)

**Times:** 9:00 a.m.—11:30 a.m.

**Days:** M, T, TH, F

**Room:** Brothers College 201

**Calculus and Analytic Geometry I—40056—MATH  
150—A**

**4 credits.** Functions, limits, continuity, and differentiation and its applications; introduction to integration including definite and indefinite integrals and the fundamental theorem of calculus; analysis of graphical and numerical information. No student may receive credit for both AP calculus AB or BC and MATH 150.

**Prerequisite:** MATH 001 with a C- or by placement exam.

**GenEd.:** CLA-Quantitative

**Instructor:** Prof. Robert McLoughlin

**Dates:** May 20—June 28 (6 weeks)

**Times:** 5:45 p.m.—8:30 p.m.

**Days:** M, W, TH

**Room:** Brothers College 120

**Introduction to Media Studies—40060—MCOM 101  
—A**

**4 credits.** In Introduction to Media Studies we will discuss how messages are created and disseminated through various forms of media including, but certainly not limited to, television, social media networks, product advertisements, and political campaigns. Looking at issues of messaging through both historical and rhetorical lenses, we will attempt to better understand our complex relationship with media as both members of a media-soaked culture and scholars examining the constructs of this culture. How is it possible to look at this culture from a distance? Can we objectively evaluate established social structures (race, gender, politics, etc.) perpetuated (or, in some cases, even created) by media institutions as members of this culture? Just how ingrained into us are these various media platforms? Equivalent Course [ENGH 121](#)

**GenEd.:** CLA-Breadth/Interdisciplinary

**Instructor:** Prof. Jeremy Blatter

**Dates:** May 20—June 28 (6 weeks)

**Times:** 10:00 a.m.—12:15 p.m.

**Days:** T, W, TH

**Room:** Brothers College 118

**Business Ethics –40063– PHIL 214 – A**

**4 credits.** A philosophical and theological study of those ethical, religious, and social issues that play an important role in thinking morally about economic and business practices. Attention is paid to practical ethical problems arising out of the functional areas of management and the wider areas of business and social responsibility in relation to the community, ecology, minorities, the role of multinationals and public safety. Same as: [REL 214](#).

**GenEd.:** CLA-Breadth/Humanities  
**Instructor:** Prof. Darrell Cole  
**Dates:** May 20 – June 21 (5 weeks)  
**Times:** 1:00 p.m. – 4:30 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 215

**Philosophy of Law – 40064 – PHIL 330 – A**

**4 credits.** A critical appraisal of various theories of law: the theory of natural law, legal positivism, legal realism, and the recent critical legal studies movement. An investigation of the limits of the authority of society over the individual, including the issues of paternalism and privacy. A study of different theories of punishment and the scope of responsibility for criminal behavior. An exploration of whether or not belief in the existence of God is rational. Arguments are considered based on the origin of the universe, the problem of evil, the nature and variety of religious experience, the phenomenon of morality, and the ethics of belief. Same as: [PSCI 330](#).

**Instructor:** Prof. Seung-Kee Lee  
**Dates:** May 20 – June 21 (5 weeks)  
**Times:** 9:00 a.m. – 12:30 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 102

**Introductory Physics I – 40065– PHYS 111 – A**

**4 credits.** Offers topics in mechanics: motion, Newton's laws, energy, conservation laws, collisions, gravitation, fluid behavior, oscillations, and waves. Thermodynamics. This is a non-calculus based course. Note that PHYS 111 does not satisfy the prerequisites for upper level physics courses; students who are or might be interested in further physics courses should take PHYS 150 and PHYS 160 instead.

**GenEd:** CLA – Breadth/Natural Science, CLA – Quantitative  
**Co-requisite:** General Physics I Laboratory – 40066 – PHIL 113 – A  
**Instructor:** Profs. Bjorg Larson & Minjoon Kouh  
**Dates:** May 20 – June 28 (6 weeks)  
**Times:** 9:00 a.m. – 12:00 p.m.  
**Days:** M, T, TH  
**Room:** Hall of Sciences S308

**General Physics I Lab – 40066– PHYS 113 – A**

**Co-requisite:** [PHYS 111](#)  
**Instructor:** Profs. Minjoon Kouh & Bjorg Larson  
**Dates:** May 20 – June 28 (6 weeks)

**Times:** 1:15 p.m. – 4:15 p.m.  
**Days:** T, TH  
**Room:** Hall of Sciences S208

**International Relations – 40136 – PSCI 104 – A**

**4 credits.** A consideration of both the realities and theoretical foundations of international relations. Themes covered include nationalism, statehood, diplomacy and negotiation, foreign policy decision-making, international political economy, global integration movements, war and other forms of international conflict, international law and organization.

**GenEd:** CLA – Breadth/Social Science, CLA-Writing in the Major  
**Instructor:** Carlos Yordan  
**Dates:** May 28 – June 20 (4 weeks)  
**Times:** 6:00 p.m. – 9:30 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 217

**~~Introduction to Psychology – 40069 – PSYC 101 – A~~**

~~**4 credits.** A consideration of the methods and discoveries of psychology in the study of behavior and experience. Includes both theoretical and experiential components. A prerequisite to all intermediate and upper level courses in psychology. Students may not receive credit for both AP psychology and PSYC 101. Offered every semester.~~

~~**GenEd.:** CLA Breadth/Social Science  
**Instructor:** Prof. Hilary Kalagher  
**Dates:** May 20 – June 21 (5 weeks)  
**Times:** 9:30 a.m. – 12:00 p.m.  
**Days:** T, W, TH  
**Room:** TBD~~

**Social Psychology – 40071 – PSYC 342 – A**

**4 credits.** An examination of how people think about, influence, and relate to others, as well as the ways in which their thoughts, feelings, and behaviors are affected by situations and social contexts. Topics include the social self, attribution, social cognition, attitudes and persuasion, social influence, attraction and relationships, stereotyping, aggression, and pro-social behaviors

**Prerequisite:** [PSYC 101](#), [PSYC 211](#)  
**Instructor:** Prof. Scott Morgan  
**Dates:** May 28 – June 28 (5 weeks)  
**Times:** 6:15 p.m. – 9:00 p.m.  
**Days:** M, T, TH  
**Room:** Hall of Sciences S3A

**Introduction to Sociology – 40072 – SOC 101 – A**

**4 credits.** A prerequisite to all other courses in sociology. An in-depth analysis of the ways in which sociologists view the world. Topics include deviance,



the family, the economy, gender, inequality, politics, race and ethnicity, socialization, and social change.  
**GenEd.:** CLA-Breadth/Social Science, CLA – Diversity US  
**Instructor:** Prof. Kyung-Tek Chun  
**Dates:** May 20 – June 28 (5 weeks)  
**Times:** 9:30 a.m. – 12:00 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 217

#### **Fundamentals of Oral and Written Spanish I – 40073 – SPAN 101 – A**

**4 credits.** An introduction to the language and cultures of the Spanish-speaking world. Development of listening, speaking, reading, and writing using a communicative, proficiency-oriented approach. Interactive practice is enhanced by multimedia/technology. Designed for students who have not taken Spanish before. Twenty-five percent of the course done outside class using various technologies.  
**Instructor:** Prof. Raul Ramos  
**Dates:** May 20 – June 14 (4 weeks)

**Times:** 9:15 a.m. – 12:25 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 204

#### **Intermediate Spanish – 40074 – SPAN 201 – A**

**4 credits.** Continuation of the Spanish language sequence with a concentration on refinement of skills in written expression and spoken accuracy. Uses Hispanic cultural and literary texts to assist in vocabulary expansion and to develop techniques in mastering authentic language in context. Twenty-five percent of the course done outside class using various technologies. Special sections of the course may be offered with a focus on Spanish for business.

**Pre-requisite:** [SPAN 102](#), [SPAN 182](#), or placement.  
**GenEd.:** CLA-Foreign Language  
**Instructor:** Prof. Raul Rosales  
**Dates:** May 20 – June 14 (4 weeks)  
**Times:** 9:15 a.m. – 12:25 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 203

## Session II

#### **Drawing I – 40002 – ART 106 – B**

**4 credits.** An introduction to drawing as a way of making images, as a basis for work in other media, and as a process of discovery. Studio activities are grounded in observation and use various wet and dry media. Line, shape, and value are emphasized as basic components for exploring fundamental issues of composition, the structuring of form, the description of space and light, and as a means of individual expression.

**GenEd.:** CLA-Breadth/Arts  
**Instructor:** Prof. Jason Karolak  
**Course Fee:** \$60  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 9:00 a.m. – 12:30 p.m.  
**Days:** M, W  
**Room:** Dorothy Young Center for Arts 206

#### **Photography I – 40006 – ART 130 – B**

**4 credits.** An introduction to the fundamentals of photographing with digital SLR cameras, along with using a range of digital imaging editing tools and output modes to produce original work. Students are encouraged to make pictures that are challenging in both content and form and express the complex and poetic nature of human experience. The course introduces the work of influential photographers, raises discussions of contemporary issues in the medium and provides tools for evaluating and expressing a photograph's communicative effectiveness. Students must provide a fully manual digital SLR camera and budget for printing costs and other supplies.

**GenEd.:** CLA-Breadth/Arts  
**Instructor:** Prof. Danna Singer  
**Course Fee:** \$125  
**Dates:** July 1 – July 30 (4 weeks)  
**Times:** 1:00 p.m. – 4:30 p.m.  
**Days:** T, W, TH  
**Room:** Dorothy Young Center for Arts 102

#### **Painting I – 40003 – ART 160 – B**

**4 credits.** An exploration of traditional and modern techniques of oil painting and their underlying theories of light, color, space, and expression.

**GenEd.:** CLA-Breadth/Arts  
**Instructor:** Prof. Isak Applin  
**Course Fee:** \$75  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 1:00 p.m. – 4:30 p.m.  
**Days:** M, W  
**Room:** Dorothy Young Center for Arts 202

#### **Anatomy and Physiology II – 40009 – BIOL 258 – B**

**4 credits.** The second of a two-course sequence examining the structure and function of specific biological systems in vertebrate organisms, with a particular focus on mammals. Includes an overview of system function at a biochemical and biophysical level, and the regulation and integration of multiple physiological systems within the whole organism. Primary focus will be on the endocrine, cardiovascular, respiratory, immune, digestive, reproductive, and urogenital systems. Laboratory will include the

exploration of the dynamic function and regulation of human physiological systems and the study of anatomy through the use of interactive digital resources in conjunction with dissection of animal specimens.

**Prerequisite:** [BIOL 250](#) or permission of instructor. [BIOL 256](#) is recommended but not required.  
**Corequisite:** Lab for Vertebrate Anatomy and Physiology II – 40010 – BIOL 258L – B  
**Instructor:** Prof. Anthony Russo  
**Dates:** July 9 – August 8 (5 weeks)  
**Times:** 9:00 a.m. – 12:00 p.m.  
**Days:** T, TH  
**Room:** Hall of Sciences S142

#### **Lab for Vertebrate Anatomy and Physiology II – 40010 – BIOL 258L – B**

**Prerequisite:** BIOL 250L  
**Corequisite:** Anatomy & Physiology I I -40016 – BIOL 258 – B  
**Instructor:** Prof. Anthony Russo  
**Dates:** July 9 – August 8 (5 weeks)  
**Times:** 9:00 a.m. – 4:00 p.m.  
**Days:** W  
**Room:** Hall of Sciences S106

#### **Organic Chemistry II – 40020 – CHEM 350 – B**

**4 credits.** A continuing systematic study of organic reactions organized on the basis of reaction mechanisms. Topics include aromaticity, carbonyls, carboxyls, amines, orbital symmetry controlled processes, and organic synthesis. Includes spectroscopic analysis. Discusses classes of compounds of biological significance.

**Pre-requisite:** C- or better in [CHEM 250](#)  
**GenEd.:** CLA-Breadth/Natural Science  
**Co-requisite:** [CHEM 350L](#)-B Organic Chemistry II Lab – 40022  
**Instructor:** Prof. Kimberly Choquette  
**Dates:** July 1 – July 26 (4 weeks)  
**Times:** 12:30 p.m. – 3:30 p.m.  
**Days:** M, T, W, TH  
**Room:** Hall of Sciences S244

#### **Organic Chemistry II – No Lab (VISITING STUDENTS ONLY) – 40021 – CHEM 350A – B**

**3 credits.** A continuing systematic study of organic reactions organized on the basis of reaction mechanisms. Topics include aromaticity, carbonyls, carboxyls, amines, orbital symmetry controlled processes, and organic synthesis. Includes spectroscopic analysis. Discusses classes of compounds of biological significance.

**Pre-requisite:** C- or better in [CHEM 250](#)  
**GenEd.:** CLA-Breadth/Natural Science  
**Instructor:** Prof. Kimberly Choquette  
**Dates:** July 1 – July 26 (4 weeks)  
**Times:** 12:30 p.m. – 3:30 p.m.

**Days:** M, T, W, TH  
**Room:** Hall of Sciences S244

#### **Organic Chemistry II Lab – 40022 – CHEM 350L – B**

**Co-requisite:** Organic Chemistry II – 40020 – CHEM 250 – B  
**Instructor:** Prof. Sandra Keyser  
**Lab Fee:** \$300  
**Dates:** July 1 – July 26 (4 weeks)  
**Times:** 8:30 a.m. – 11:30 a.m.  
**Days:** M, T, W, TH  
**Room:** Hall of Sciences S226

#### **Introduction to Computer Science in JavaScript – 40026 – CSCI 149 – B**

**4 credits.** How can we automatically solve problems using computers? By the end of this course, students should be able to implement solutions to solve basic computational problems using the JavaScript programming language. Students will learn to design, implement, document and test programs, as well as learn to apply language concepts such as iteration, decision, user-defined functions, and lists. No previous programming experience is expected. Prospective computer science majors or minors should begin with this course which is also appropriate for students who wish to learn some programming but do not plan to take any additional computer science courses.

**GenEd:** CLA – Quantitative  
**Instructor:** Adam Michlin  
**Dates:** July 1 – August 2 (5 weeks)  
**Times:** 5:00 p.m. – 7:40 p.m.  
**Days:** M, W, TH  
**Room:** Brothers College 21

#### **Introduction to Computer Science in Python – 40027 – CSCI 150 – B**

**4 credits.** How can we automatically solve problems using computers? By the end of this course, students should be able to implement solutions to solve basic computational problems using the Python programming language. Students will learn to design, implement, document and test programs, as well as learn to apply language concepts such as iteration, decision, user-defined functions, and lists. No previous programming experience is expected. Prospective computer science majors or minors should begin with this course which is also appropriate for students who wish to learn some programming but do not plan to take any additional computer science courses.

**GenEd:** CLA – Quantitative  
**Instructor:** Professor Ziyuan Meng  
**Dates:** July 1 – August 2 (5 weeks)  
**Times:** 9:45 a.m. – 12:25 p.m.  
**Days:** M, W, TH  
**Room:** Brothers College 21



**Object Oriented Programming in Java – 40030 – CSCI 151 – B**

**4 credits.** Designing, writing, and testing structured computer programs using Java. By the end of this course, students should be able to (1) decompose problems into actions and objects, (2) apply advanced programming constructs such as recursion and collections to implement solutions, (3) use inheritance to facilitate localized changes, (4) design & implement an event-driven application with a graphical user interface, and (5) take advantage of automated development tools.

**Prerequisite:** C- or better in [CSCI 149](#) or [CSCI 150](#), or [CSCI 117](#) or other prior programming experience

**GenEd:** CLA – Quantitative

**Instructor:** Diane Liporace

**Dates:** July 1 – August 2 (5 weeks)

**Times:** 1:00 p.m. – 3:45 p.m.

**Days:** M, W, TH

**Room:** Brothers College 21

**Introduction to Computer Systems & Architecture – 40031 – CSCI 260 – B**

**4 credits.** Introduction to computer systems and architecture. Architecture concepts include machine-level representation of data, assembly language programming, von Neumann architecture, the memory hierarchy and pipelining (including instructions, data and thread level parallelism). Functions of the UNIX operating system from a user's and programmer's perspective. Introduction to C systems programming, pointers, and UNIX command line tools. Cannot receive credit for both CSCI 320 and CSCI 260.

**Instructor:** Prof. Adam Michlin

**Dates:** July 1 – August 2 (5 weeks)

**Times:** 1:00 p.m. – 3:40 p.m.

**Days:** M, W, TH

**Room:** Hall of Sciences S305

**Economic Principles: Macroeconomics – 40039 – ECON 102 – B**

**4 credits.** An introduction to basic macroeconomic analysis with special emphasis on problems of unemployment, inflation, and economic growth. Topics include national income determination; money, financial markets, and monetary policy; fiscal policy and the economic role of government; the United States and the world economy.

**GenEd:** CLA – Breadth/Social Science, CLA – Quantitative

**Instructor:** Prof. Akwasi Nti-Addae

**Dates:** July 1 – August 1 (4 weeks)

**Times:** 10:45 a.m. – 12:45 p.m.

**Days:** M, T, W, TH

**Room:** Brothers College 216

**Intermediate Selected Topics in Literature: Young Adult Fiction – 40047 – ENGH 201 – AB**

**4 credits.** In this course, we'll delve into the sprawling genre of young adult fiction (YA). Specifically, we'll focus on the sub-genre of YA science fiction and fantasy. As one of the most prevalent strands of YA fiction, sci-fi/fantasy finds characters inhabiting strange worlds where nothing makes sense and everything they know is subject to change. So, in other words, not all that different from the normal teenage experience. We'll read a Harry Potter novel (of course), but we'll look beyond this exceptionally popular series to also consider stories about the ravages of climate change, the horrors of mind control, and the fairies of the Jersey Shore. No prior experience with YA fiction or with college-level literature courses is required. Suitable for fans of YA fiction, students of contemporary literature, aspiring K-12 teachers, and others intrigued by the subject matter.

**GenEd.:** CLA-Breadth/Humanities

**Instructor:** Prof. Jens Lloyd

**Dates:** July 1 – August 9 (6 weeks)

**Times:** 1:00 p.m. – 4:10 p.m.

**Days:** M, W

**Room:** Brothers College 204

**Food Writing – 40045 – ENGH 232 – B**

**4 credits.** Writing about food invites students to practice the art of description and to understand the relationship between writing and experience, language and desire. From cookbooks, magazines, and websites to restaurant reviews, cultural guides, and television shows, the role of food writing is to inform, but also to foster curiosity and to create a desire in readers to experience what the writer describes. In this way, perfecting the art of food writing also strengthens aspects of the writer's craft that may be used in other persuasive contexts. Students will explore the role of audience, purpose, and context as they read a variety of forms of food writing and practice food writing in print and digital formats.

**Instructor:** Prof. Henry Margenau

**Dates:** July 1 – August 9 (6 weeks)

**Times:** 5:00 p.m. – 8:30 p.m.

**Days:** M, W

**Room:** Brothers College 215

**Global Perspectives through an interdisciplinary study of Irish History and Culture – 40137 - HUM 197 – X**

**3 Credits.** Ireland offers an important socio-historical framework of the fluidity of identity and ethnicity. British imperialism, Famine, the impact of emigration on the United States, the decline and revival of indigenous culture, the civil rights campaign, and conflict and conflict resolution in Northern Ireland, all provide a platform for a valuable comparative study in the global context.

The program will take place on campus at the Institute of Study Abroad Ireland in Donegal, in the Republic of Ireland. Over three weeks, students will cover a timeline from the neolithic period of Irish history to the present day. The aim is to provide the opportunity for interdisciplinary and comparative thinking about the cultural and anthropological development of the Irish, through the earliest tribal settlements, through the colonization experience, the experience of political, cultural and economic revolution, and the emergence of a modern Irish Republic 100 years after independence.

**Instructor:** Niamh Hamill  
**Dates:** July 9 – 30, 2019 (3 weeks)  
**Location:** Donegal, Ireland  
**Audience:** Pre-college program for students age 15 – 17 only.  
Special application required

**Preparation for Calculus – 40054 – MATH 001 – B 4 credits.** The mathematical prerequisites for the study of calculus: functions and their graphs, polynomials, trigonometry, logarithms and exponential functions, and analytic geometry. Only students intending to register for calculus but needing to improve their math background may take this course.

**Prerequisite:** Departmental approval based on placement score.  
**Instructor:** Prof. Seth Harris  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 6:00 p.m. – 8:30 p.m.  
**Days:** M, T, TH  
**Room:** Brothers College 117

**Introductory Statistics – 40053 – MATH 117 – B 4 credits.** This course is designed to enable you to use statistics for data analysis and to understand the use of statistics in the media. The course makes use of SPSS, a widely-used statistics package for the computer. Course topics include graphical and tabular presentation of data, measures of central tendency, dispersion, and shape, linear transformations of data, correlation, regression, basic probability and the normal probability model, sampling, t-tests, and one-way analysis of variance. Same as: MAT+861.

**GenEd.:** CLA-Quantitative  
**Instructor:** Prof. Yi Lu  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 10:00 a.m. – 12:30 p.m.  
**Days:** M, W, F  
**Room:** Brothers College 215

**Calculus and Analytic Geometry I – 40057 – MATH 150 – B**

**4 credits.** Functions, limits, continuity, and differentiation and its applications; introduction to integration including definite and indefinite integrals and the fundamental theorem of calculus; analysis of graphical and numerical information. No student may receive credit for both AP calculus AB or BC and MATH 150.

**Prerequisite:** MATH 001 with a C- or by placement exam.  
**GenEd.:** CLA-Quantitative  
**Instructor:** Prof. Virginia Crisonino  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 1:30 p.m. – 4:00 p.m.  
**Days:** M, W, TH  
**Room:** Brothers College 218

**Calculus and Analytic Geometry II – 40055 – MATH 151–B**

**4 credits.** Integration, including techniques of integration, improper integrals, and applications; polar coordinates, parametric equations, Taylor polynomials, sequences and series. No student may receive 8 credits for AP Calculus BC and MATH 151

**Prerequisite:** C- or better in [MATH 150](#)  
**GenEd.:** CLA-Quantitative  
**Instructor:** Prof. Seth Harris  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 10:00 a.m. – 12:30 p.m.  
**Days:** M, T, TH  
**Room:** Brothers College 218

**Calculus and Analytic Geometry III – 40059 – MATH 250–B**

**4 credits.** Extending the concepts of calculus from two to three or more dimensions: partial differentiation, multiple integration; analytic geometry in three dimensions, vectors, line and surface integrals, applications.

**Prerequisite:** C- or better in [MATH 151](#)  
**GenEd.:** CLA-Quantitative  
**Instructor:** Prof. Virginia Crisonino  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 5:00 p.m. – 7:30 p.m.  
**Days:** M, W, TH  
**Room:** Brothers College 218

**Forms: Special Topics in Media – Forms:**

**Propaganda – 40061 – MCOM 203 –B**

**4 credits.** This course will analyze the development, principles, techniques, and results of mass persuasion from its beginnings in ancient civilizations through to its development in modern society. We will study mass persuasion and propaganda in war and peace, including advertising. Through readings, viewings of films and videotapes, examination of graphic and print materials, and class discussions, we will consider the roles of mass

persuasion and propaganda in the past and present, and consider their implications for the future.

**GenEd.:** CLA-Breadth/Humanities  
**Instructor:** Prof. Joseph Vitale  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 10:00 a.m. – 12:15 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 201

**Introduction to Neuroscience – 40062 – NEUR 101-B**  
**4 credits.** This introductory course explores how the physical properties of the brain give rise to mental processes. Students will investigate current major challenges in neuroscience research such as searching for a cure to Alzheimer’s disease, examining the biological basis of memory and investigating the nature of consciousness. While focusing in these challenges, students will learn important fundamental knowledge of neuroscience in the area of genetics, neurotransmission, neural development, brain anatomy, cognition and computational neural modeling.

**GenEd.:** CLA-Breadth/Interdisciplinary,  
CLA-Breadth/Natural Science  
**Instructor:** Prof. Roger Knowles  
**Dates:** July 1 – August 2 (5 weeks)  
**Times:** 1:00 p.m. – 3:30 p.m.  
**Days:** T, W, TH  
**Room:** Hall of Sciences S142

**Introductory Physics II – 40067 – PHYS 112 – B**  
**4 credits.** PHYS 112 includes electricity, magnetism, and electrical circuits. Light and optics: lenses, diffraction and interference of light. Introductory topics in modern physics. This is a non-calculus based course. Note that PHYS 2 does not satisfy the prerequisites for upper-level physics courses; students who are or might be interested in further physics courses should take [PHYS 150](#) and [PHYS 160](#) instead.

**GenEd:** CLA – Breadth/Natural Science,  
CLA – Quantitative  
**Prerequisite:** [PHYS 111](#) or PHYS 150  
**Co-requisite:** [PHYS 114-B](#) General Physics  
Laboratory II - 40068  
**Instructor:** Professor Bjorg Larson & Professor  
Minjoon Kouh  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 9:00 a.m. – 12:00 p.m.  
**Days:** M, T, TH  
**Room:** Hall of Sciences S139

**General Physics Laboratory II – 40068 – PHYS 114 – B**

**Co-requisite:** [PHYS 112-B](#) Introduction to Physics  
II - 40067  
**Instructor:** Professor Bjorg Larson & Professor  
Minjoon Kouh  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 1:15 p.m. – 4:15 p.m.

**Days:** T, TH  
**Room:** Hall of Sciences S208

**Introduction to Psychology – 40070 – PSYC 101 – B**  
**4 credits.** A consideration of the methods and discoveries of psychology in the study of behavior and experience. Includes both theoretical and experiential components. A prerequisite to all intermediate- and upper-level courses in psychology. Students may not receive credit for both AP psychology and PSYC 101. Offered every semester.

**GenEd.:** CLA-Breadth/Social Science  
**Instructor:** Prof. Scott Morgan  
**Dates:** July 1 – August 9 (6 weeks)  
**Times:** 6:45 p.m. – 9:00 p.m.  
**Days:** M, T, TH  
**Room:** Hall of Sciences S4

**Fundamentals of Oral and Written Spanish II – 40075 – SPAN 102 – B**

**4 credits.** Continuation of the introduction to the Spanish language. Progressive mastering of the four skills of listening, speaking, reading and writing. Emphasis on using language in context to expand self-expression. Twenty five percent of the course done outside of class using various technologies. Special sections of the course may be offered with a focus on Spanish for business.

**Pre-requisite:** [SPAN 101](#), [SPAN 181](#) or placement  
**Instructor:** Prof. Maria Turrero-Garcia  
**Dates:** July 9 – August 1 (4 weeks)  
**Times:** 9:15 a.m. – 12:25 p.m.  
**Days:** T, W, TH  
**Room:** Brothers College 204

**Theatre in the Community: The Newark Collaboration – 40076 – THEA 386 – B**

**4 credits.** This course is a collaborative theatre-making enterprise in which Drew students will team with high school students from the Newark inner city schools to create original work that will be presented both on Drew's campus and at the Marion Bolden Student Center in Newark. Classes will likewise meet at both locations, with Drew students and Newark students traveling to the two sites by turn. Drew participants will both mentor and share in the process of original play development and performance. In addition to the weekly play development workshops and rehearsals with the Newark students, Drew participants will meet frequently on their own, to assess and develop strategies for facilitating the work of the full group and keeping it on track. A research component studying the historical impact of community-based theaters around the globe, together with a final paper, will also be required of Drew students. Course may be repeated. Enrollment restricted to sophomores, juniors, and seniors. Enrollment priority: Priority given to theatre majors, theatre minors, and seniors. Signature of instructor required for registration.

**Pre-requisite:** 8 credits prior theatre classes  
required  
**GenEd.:** CLA-Diversity US, CLA-Off  
Campus Exp.  
**Instructor:** Profs. Lisa Brenner & Christopher  
Ceraso  
**Dates:** July 9 – July 30 (4 weeks)  
**Times:** 9:00 a.m. – 4:00 p.m.  
**Days:** M, T, W, TH, F  
**Room:** Dorothy Young Center for Arts 138