## 为 LEHIGH U $\quad \mathrm{N} \quad \mathrm{I}$ V $\quad \mathrm{E} \quad \mathrm{R}$ S I T Y

# Class of 2028 - Fall 2024 Course Registration Guide 

## College of Arts \& Sciences

## — TABLE OF CONTENTS -

College Welcome Letter ..... 1
First-Year Course Registration Guide ..... 2
Major \& Minor Programs ..... 5
Sample Course Schedules ..... 6
Mathematics Courses \& Calculus Placement Guidelines ..... 7
Advanced Placement \& College Credit Information ..... 12
Pre-Health \& Pre-Law Track Information ..... 14
Big Questions Seminars ..... 16


May 2024

Dear Members of the Class of 2028:
Welcome to the College of Arts \& Sciences (CAS) at Lehigh University! We are delighted you've made the decision to continue your academic career as part of the CAS family.

This booklet and our online resources are designed to aid you in every step of the academic onboarding and registration process. Later in July you will be able to register for your first fall semester. To prepare to register online, please read through this packet carefully and review our online resources available via go.lehigh.edu/CASFYAdvising.

You will receive weekly emails from our office beginning in June from inadvise@lehigh.edu, and we will share many ways to get in touch with our office, along with weekly advising tips. We look forward to hearing from you and working with you to register for the fall. Do not hesitate to reach out with any questions you might have!

When you arrive on campus for Orientation in August you will meet with your faculty academic advisor and consult with them to review your course selections and make any necessary changes to your schedule. In addition to your academic advisor, you will be supported by the CAS Academic Advising Center and our amazing team of faculty and staff. In particular, you may look forward to hearing from the Director of Academic Planning, Professor Frank Pazzaglia, the Assistant Dean of Undergraduate Advising, Beth Pelton, and our academic success advisor, Jackie Oswald.

The CAS Advising Center is located in 120 Williams Hall, and we hope you visit us in the fall semester. We look forward to working with you as you begin your Lehigh experience!

Sincerely,


Dr. Kelly Austin
Associate Dean of Undergraduate Programs

## College of Arts \& Sciences First-Year Course Registration Guide

## Read through the information below before you register!

## Registration for the Fall semester will open in July, and this packet and referenced online resources will aid you in that process. Please read through the information below and visit go.lehigh.edu/CASFYAdvising. We encourage you to reach out to us with questions at any time!

## Academic Advising

Academic advising during first-year onboarding is provided by a team of faculty and staff in the CAS Advising Center. We will be available to you all summer to help you choose courses, review and understand requirements, and answer your academic questions. We will send you schedule suggestions, confirm the appropriate math or calculus requirement, and review your schedule throughout registration to make sure you are on the right track.

## Contact Information:

- Email: inadvise@lehigh.edu
- Phone: 610-758-3301
- Live Chat: go.lehigh.edu/caslivechat
- Website: go.lehigh.edu/CASFYAdvising
- CourseSite: coursesite.lehigh.edu and 'CASUNDERGRAD'

What to Expect:

- Area of Interest Survey: you will receive a short Area of Interest Survey in June from our office via inadvise@lehigh.edu. Be sure to complete this survey as it provides information critical to assigning your academic advisor and providing fall course guidance.
- Weekly Emails: you will receive weekly emails from our office beginning in June, providing you with general reminders and tips, and ways to reach out with questions.
- Information Sessions \& Drop-In Advising Zoom Sessions: dates and links will be advertised in the weekly emails and also through the First-Year Student Portal.


## Advisor Assignment:

You will be assigned a faculty 'non-major' advisor who will serve as your primary academic advisor and work with you until you declare a major. Your advisor will assist you with course selection, choosing a major, and navigating academic processes. You will be paired with an advisor based on your intended degree program as well as the courses selected for your fall schedule. You will be emailed in early August your advisor assignment and will meet with this professor during orientation on Friday, August 23rd, at which time you will have an additional opportunity to make adjustments to your fall schedule, should that be necessary.

Once you formally declare your major, you will be re-assigned to a major advisor, a faculty member in the department in which you declared. Students in the CAS are expected to declare a major by the end of their Sophomore year, or fourth semester. You are welcome to work with the CAS Advising Center and the Center for Career and Professional Development in choosing a major program that will best suit your individual skill sets and help you achieve your academic and professional goals.

## STEP 1 - What are the Requirements?

Each undergraduate college has a set of basic requirements all students must complete regardless of their major program(s).

## College of Arts \& Sciences Requirements

## First-Year Writing ( 6 credits)

- WRT 001: Academic \& Analytical Writing
- WRT 002: Research \& Argument
- Students who earn credit for both WRT 001 \& 002 through AP or IB scores will take WRT 011: Advanced Writing: The Rhetorical Self, to complete the FY Writing requirement.
- Options for multilingual speakers, WRT 003 \& 005, are available through appropriate placement with the International Center for Academic \& Professional English (ICAPE).


## Big Questions Seminar (3-4 credits)

## Mathematics (MA, 3 credits)

## Disciplinary Perspectives (7 credits in each area)

- Investigating the Natural World (NW, must include an associated lab)
- Investigating the Social World (SW)
- Creating \& Expressing through Arts \& Languages (AL)
- Interpreting \& Understanding Human Experience (HE)


## Encounters (3 in each of 3 areas)

- Contemporary Challenges (CC)
- Quantitative Reasoning (Q)
- Writing (W)


## Additional details:

- You need to register for a minimum of 12 credits to be a full-time student, while the maximum number of credits you can take in your first semester is 17.
- A typical course load is 14-16 credits (most courses are each 3 or 4 credit hours), meaning you should register for 4 or 5 courses in your first semester.
- You can register for courses that start with a zero (0), for example PSYC 001: Intro to Psychology. For a full list of courses available to you please visit go.lehigh.edu/FYCourses.


## STEP 2 - What Courses Should I Register For?

In your first semester you will begin the First-Year Writing sequence and select your Big Questions Seminar. You should plan to register for:

- WRT 001: Academic \& Analytical Writing (3 credits)
o Students who provide credit via AP or IB scores for both WRT $001+002$ will take WRT 011 to fulfill the Writing requirement
- Big Questions Seminar (3-4 credits)
o Options for Fall 2024 found on page 16 or via go.lehigh.edu/BigQuestionsSeminars
- Two or more courses related to your intended major or area of interest ( $\sim 8$ credits)
- Sample course schedules are provided on page 6 or via go.lehigh.edu/CASSampleSchedules
- A list of courses available to first-year students is available via go.lehigh.edu/FYCourses

Total: 14-16 credits (12 credits minimum required)
Please note:
> Many majors do not require you to begin coursework in the first semester, meaning you are free to explore various courses. However, other majors (especially our Bachelor of Science, or BS, degree programs), require you to start right away. Be sure to review your intended major(s) and find out what special requirements that major may have for first-year students. If it is math, what math course do they require? If it is chemistry or biology, which course is required to be taken first?

## If you don't know what you want to major in, that is ok, too!

If you are undecided on a potential major don't worry, we encourage first-year students to select courses in a variety of programs to discover their intellectual passion. Most students use the Distribution Requirements to guide their first semester course selections so they can both explore their intellectual interests and start fulfilling the CAS distribution requirements.

## STEP 3 - Review Your Record for Applied AP or Transfer Credits

If you expect AP or transfer credit, make sure to have your scores and/or transcript sent to Lehigh! If your scores aren't reported in a timely manner, the Office of Registration and Academic Services will bar you from taking anything more advanced than introductory courses during your first semester. You should also review the 'Advanced Placement and College Credit' section on page 12 in this booklet for detailed information on how various departments treat AP, SAT, ACT, and IB credit.

## STEP 4 - Schedule Building Strategy

Tips to build your schedule in July:

- Make a list of the courses you need* to register for;
- Make a list of the courses you would like to register for;
- Check if courses have pre-requisites (via catalog), or registration permissions (via course schedule);
- Review the FAQs and instructional videos on how to look up and register for classes at fysenroll.lehigh.edu;
- Register for the highest priority courses first;
- If you are exploring your options and not required to take a strict set of courses, you should register for the course with the fewest available seats first.

[^0]
## CAS Major \& Minor Programs

Below is a complete list of the major and minor programs available through the College of Arts \& Sciences. Contact information for each major and minor is provided through individual department and program webpages, or you may visit go.lehigh.edu/CASMajorContact for a quick reference guide.

Africana Studies, BA, M<br>Anthropology, BA, M<br>Architecture, BA, M<br>Art, BA, M<br>Art History, BA, M<br>Asian Studies, BA, M<br>Astronomy, BA, M<br>Astrophysics, BS<br>Biochemistry, BS<br>Biology, BA, BS, M<br>Chemistry, BA, BS, M<br>Chinese, BA, M<br>Cognitive Science, BA, BS, M<br>Computer Science, BA, BS, M<br>Design, BA, M (Graphic or Product)<br>Earth \& Environmental Science, BA, BS, M<br>Economics, BA, BS, M<br>English, BA, M<br>Environmental Studies, BA, M<br>French \& Francophone Studies, BA, M<br>German, BA, M<br>Global Studies, BA, M<br>Global Studies \& Modern Lang \& Lit (Joint major), BA<br>Health, Medicine, \& Society, BA, M<br>BA = Bachelor of Arts<br>BS = Bachelor of Science<br>M = Minor

History, BA, M
International Relations, BA, M
Internat'I Rel \& Economics (Joint major), BA
Internat'l Rel \& Modern Lang \& Lit (Joint major), BA
Japanese, BA, M
Journalism, BA
Latin American \& Latino Studies, BA, M
Mathematics, BA, BS, M
Molecular \& Cellular Biology, BA, BS, M
Music, BA, M
Neuroscience, BA, BS
Pharmaceutical Chemistry, BS
Philosophy, BA, M
Physics, BA, BS, M
Political Science, BA, M
Psychology, BA, BS, M
Religion, Culture, \& Society, BA, M
Sociology, BA, M
Sociology \& Anthropology, BA, M
Spanish \& Hispanic Studies, BA, M
Statistics, BA, BS
Theatre, BA, M
Women, Gender, \& Sexuality Studies, BA, M

## Special Programs:

Arts-Engineering 5-year Combined Degree Program
IDEAS: Integrated Degree in Engineering \& Arts \& Sciences
Pre-Dental Accelerated Degree Program
Pre-Optometry Accelerated Degree Program
$4+1$ Accelerated Master's Elementary and Secondary Education

## Minor-Only Programs:

Actuarial Science
Apparel Design
Creative Writing
Documentary Storymaking
Film Studies
International Film
Jewish Studies

Journalism: Science \& Environmental Writing
Mass Communication
Museum Studies
Philosophy, Law, \& Public Policy
Public Administration
Russian
Writing

Students in the College of Arts \& Sciences are also able to pursue minor programs available through the College of Business, Engineering, Health, and even the Graduate College of Education. A dedicated list with more information is available via go.lehigh.edu/MinorsOutsideCAS.

## Sample Course Schedules

Sample course schedules for all majors in the College of Arts \& Sciences are provided via go.lehigh.edu/CASSampleSchedules.

- Course requirements for all degree programs are available via the catalog (catalog.lehigh.edu).
- All students are expected to enroll in a Big Questions Seminar in the Fall semester.
- Students who earn credit for both WRT 002 \& 002 from AP or IB scores will take WRT 011: Advanced Writing: The Rhetorical Self to fulfill the First-Year Writing requirement.


## Art, Art History, or Design (Graphic or Product):

| FALL | SPRING |
| :--- | :--- |
| WRT 001: Academic \& Analytical Writing (3) | WRT 002: Research \& Argument (3) |
| Big Questions Seminar (3-4) | ART 002: Art History: Renaissance to Present (4) |
| ART 001: Art \& Architecture History I (4) | ART 003: Two-Dimensional Design OR <br> ART 004: Three-Dimensional Design (4) |
| Free Elective/Disciplinary Perspective (4) | Free Elective/Disciplinary Perspective (4) |
| Total Credits: 14-15 credits | Total: $\mathbf{1 5}$ credits |

Biological Sciences, Behavioral Neuroscience, Biochemistry, Molecular Biology or Pre-Health:

| FALL | SPRING |
| :--- | :--- |
| WRT 001: Academic \& Analytical Writing (3) | WRT 002: Research \& Argument (3) |
| Big Questions Seminar (3-4) | BIOS 041+042: Bio Core I: Cellular \& Molec (4) |
| MATH 051: Survey of Calculus I OR <br> MATH 021: Calculus I (4) | MATH 052: Survey of Calculus II (3) OR <br> MATH 022: Calculus II (4) |
| CHM 030: Intro to Chemical Principles OR <br> CHM 040: Honors General Chemistry I (4) | CHM 031: Chem. Equilibria in Aqueous Sys OR <br> CHM 041: Honors General Chemistry II (4) |
| Total Credits: $\mathbf{1 4 - 1 5}$ credits | Total: 14-15 credits |

## Undecided:

| FALL | SPRING |
| :--- | :--- |
| WRT 001: Academic \& Analytical Writing (3) | WRT 002: Research \& Argument (3) |
| Big Questions Seminar (3-4) | Exploratory Course/Distribution Requirement (4) |
| Exploratory Course/Distribution Requirement (4) | Exploratory Course/Distribution Requirement (4) |
| Exploratory Course/Distribution Requirement (4) | Exploratory Course/Distribution Requirement (4) |
| Total Credits: $\mathbf{1 4 - 1 5}$ credits | Total: $\mathbf{1 5}$ credits |

This schedule should be diversified with introductory courses in different disciplines.

## Mathematics Courses \& Calculus Placement Guidelines

The College of Arts \& Sciences has a 3-credit mathematics (MA) requirement as part of its distribution requirements. A list of all CAS majors and their required math course(s) is available via go.lehigh.edu/CASMathReqs.

The only majors in our college that require calculus are those in the Biological Sciences, Chemistry, Cognitive Science, Computer Science, Economics, Joint International Relations and Economics, Mathematics, Physics, and the B.S. programs in both Earth and Environmental Science and Psychology. Please note: The Phi Beta Kappa profile also includes calculus.

In general, students leaning toward Social Science majors or those in the Arts and Humanities can pursue a non-calculus course to satisfy their Math requirement. In all cases, students should consult the 2024-2025 Course Catalog (catalog.lehigh.edu) to determine the mathematics course(s) that are required and recommended by different degree programs.

## Non-Calculus Mathematics Courses:

| MATH 005: Introduction to Mathematical Thought |  |
| :---: | :--- |
| $\mathbf{3}$ credits, Spring semester |  | \left\lvert\, \(\left.\begin{array}{c|l|}\hline Who should take this <br>

course?\end{array} \quad $$
\begin{array}{l}\text { Students who are pursuing a major that does not have a specific math course } \\
\text { requirement, such as those in the Humanities. }\end{array}
$$\right.\right]\)

| MATH 012: Basic Statistics <br> 4 credits, Fall \& Spring semester |  |
| :---: | :--- |
| Who should take this <br> course? | This course can be used to satisfy math requirements for majors in Anthropology, <br> Earth and Environmental Science, Environmental Studies, Journalism, Psychology <br> and Sociology. |
| Course Description: | A first course in the basic concepts and methods of statistics with illustrations from <br> the social, behavioral, and biological sciences. Descriptive statistics; frequency <br> distributions, mean and standard deviation, two-way tables, correlation and <br> regression; random sampling, rules of probability, probability distributions and <br> parameters, parameter estimation, confidence intervals, hypothesis testing, <br> statistical significance. |


| MATH / PHIL 014: Symbolic Logic <br> 4 credits, Fall semester |  |
| :---: | :--- |
| Who should take this <br> course? | Students planning to major in Philosophy or who have an interest in the theory of <br> symbolic logic. |
| Course Description: | This course is an introduction to logical theory. Our primary goal is to study the <br> notions of logical consequence and provability. The central question that we will <br> try to answer is this: What exactly does it mean to say that some conclusion is a <br> logical consequence of or is provable from a certain collection of premises? To <br> answer this question as clearly and rigorously as possible, we will develop three <br> symbolic logical systems: Term Logic, Sentence Logic, and Predicate Logic. |


| MATH 043: Survey of Linear Algebra <br> 3 credits, Fall semester |  |
| :--- | :--- |
| Who should take thiscourse? | Many students in the sciences will take a different linear algebra course, MATH <br> 205 or MATH 242 but MATH 043 can be used to satisfy math requirements for <br> majors in Biochemistry, Earth and Environmental Science, Pharmaceutical <br> Chemistry, Psychology as well the BA degrees in Computer Science and <br> Chemistry |
| Course Description: | This course introduces students to linear algebra. This is the mathematics <br> underlying Google search engine; Markov chains, which have applications in <br> many areas of science and social science; the analysis of big data; as well as <br> many other areas of application. |


| MATH / PHIL 114: Metalogic <br> 4 credits, Sophomore status <br> Who should take this <br> course? <br> Students planning to major in Philosophy or who have an interest in the theory of <br> symbolic logic. <br> Course Description: <br> This is a course on the metatheory of First-Order Predicate Logic. It offers <br> expositions of some of the most important results of this metatheory, such as the <br> Soundness and Completeness Theorems, Godel's first and second <br> Incompleteness Theorems, Tarski's Indefinability Theorem, and Church's <br> Undecidability Theorem. It also offers introductory expositions of set theory, <br> computability theory, and Second-Order Predicate Logic. The course is structured <br> to serve the needs of a mixed audience, including students with no background in <br> symbolic logic. |
| :---: | :--- |

## Calculus Courses:

A solid high school precalculus course is necessary background for calculus at Lehigh. Students need a strong foundation in functions and trigonometry to really thrive in calculus. Calculators are not permitted in exams or quizzes in Lehigh calculus classes. With different calculus sequences, the Mathematics Department is able to tailor its offerings to students with different preparations and needs for studying calculus.

Every student who intends to take an introductory Calculus class at Lehigh will be required to take an assessment provided by ALEKS from McGraw-Hill for placement, available beginning in June via go.lehigh.edu/ALEKS. Direct communication about ALEKS will be shared with all incoming students via their Lehigh email address. ALEKS will administer an assessment that will provide a score, which will indicate the appropriate first semester Calculus course(s). ALEKS will also indicate the topics and areas for improvement and will provide modules to help students get ready for the Fall semester. After working through these modules, students have the opportunity to test again and improve their Calculus placement results.

## Please note:

- If your Calculus placement is MATH 021 you may choose MATH 051 or 081 instead, if appropriate for your intended major;
- MATH 021 serves as a replacement for MATH 081 or MATH 051 wherever required but not vice-versa;
- MATH 081 or MATH 021 satisfy the College of Business Calculus requirement but MATH 051 does not;
- College of Arts \& Sciences students require special permission to enroll in MATH 081;
- Every student will receive a Calculus \& Mathematics placement email in July ahead of registration from inadvise@lehigh.edu

| MATH 000: Prep for Calculus <br> 2 credits, Fall \& Summer semester |  |
| :---: | :--- |
| ALEKS Score: | 60 or below |
| Who should take this <br> course? | Students who are not ready to start Calculus at Lehigh but will require it for a <br> major or minor program. |
| Course Description: | Tntensive review of fundamental concepts in mathematics utilized in calculus, <br> including functions and graphs, exponentials and logarithms, and trigonometry. <br> This course is for students who need to take MATH 051, 081 or 021, but who <br> require remediation in precalculus. The credits for this course do not count <br> toward graduation, but do count toward GPA and current credit count. |
| MATH 000 will be offered during Summer Session II, beginning July 1, 2024. If you are not prepared to take <br> Calculus I and are pursuing a major that requires Calculus, you should consider taking MATH 000 as early <br> as possible. Please reach out to fysenroll@lehigh.edu for more information about enrolling in MATH 000 <br> this summer. Students who are eligible for financial aid will have a reduced or completely covered cost of <br> summer tuition. |  |

MATH 051: Survey of Calculus I
4 credits, Fall \& Spring semester

| ALEKS Score: | 61 or greater |
| :---: | :--- |
| Who should take this <br> course? | Students following the Pre-Health track or those planning to major in one of the <br> Biological Sciences, Architecture, the B.S. in Cognitive Science, the B.S. in Earth <br> \& Environmental Sciences, among others. |
| Course Description: | Limits. The derivative and applications to extrema, approximation, and related <br> rates. Exponential and logarithm functions, growth and decay. Integration. <br> Trigonometric functions and related derivatives and integrals. |


| $\begin{array}{c}\text { MATH 081: Calculus I with Business Applications } \\ \text { 4 credits, Fall \& Spring semester }\end{array}$ |  |
| :---: | :--- |
| ALEKS Score: | 68 or greater |
| Who should take this |  |
| course? |  |\(\left.\quad \begin{array}{l}Open only to students in the College of Business. CAS students may request <br>

permission via email to inadvise@lehigh.edu. <br>
Students interested in the BA in Economics, the Joint IR/Economics major, or <br>
those desiring to switch to Business may consider this course\end{array}\right]\)

| MATH 075: Calculus I, Part A <br> $\mathbf{2}$ credits, Fall semester |  |
| :---: | :--- |
| ALEKS Score: | 61 or greater |
| Who should take this <br> course? | For students who need MATH 021 but do not meet the SAT or ACT score <br> requirements to register for MATH 021. |
| Course Description: | Covers the same material as the first half of MATH 021. Meets three hours per <br> week, allowing more class time for each topic than does MATH 021. |
| Completing MATH 075 and 076 substitutes for MATH 021. To complete the sequence, students will need to <br> take MATH 076: Calculus I, Part B (2 credits) in the spring semester. |  |

## MATH 021: Calculus I <br> 4 credits, Fall \& Spring semester

| ALEKS Score: | 76 or greater |
| :---: | :--- |
| Who should take this |  |
| course? | For students majoring in Mathematics, Physics, Computer Science, the BS in <br> Economics, and certain Chemistry majors, or students who may transfer to <br> Engineering. |
| Course Description: | Functions and graphs; limits and continuity; derivative, differential, and <br> applications; indefinite and definite integrals; trigonometric, logarithmic, <br> exponential, and hyperbolic functions. |



ALEKS Scores: $44 \quad 60 \quad 92$

## Calculus Courses for students with AP, IB, or Transfer credit:

> Please note: Students seeking placement into calculus II or higher must provide credentials to Registration \& Academic Services (this includes approved TR, IB, or AP credit) prior to registration. No change in registration will be allowed until the proper credentials arrive, and the deadline is the $10^{\text {th }}$ day of class (Friday, September 6, 2024). No exceptions will be made.
> The Mathematics Department offers an anticipatory exam for students who feel that they have mastered the material of Math 21, Math 22, or Math 23, but do not have the credentials for approved credit. Please be aware that the success rate on this exam is typically very low. You may contact LUMath@lehigh.edu for information on the contents of this exam.
$>$ Receiving credit for MATH 021 exempts a student from having to take MATH 051 or 081
> Receiving credit for MATH 022 exempts a student from having to take MATH 052

| MATH 022: Calculus II <br> 4 credits, Fall \& Spring semester |  |
| :---: | :--- |
| Who should take this <br> course? | For students with credit for MATH 021 who intend to pursue a major requiring <br> advanced Calculus. |
| Course Description: | Applications of integration; techniques of integration; separable differential <br> equations; infinite sequences and series; Taylor's Theorem and other <br> approximations; curves and vectors in the plane. |


| MATH 023: Calculus III <br> 4 credits, Fall \& Spring semester |  |
| :---: | :--- |
| Who should take this <br> course? | For Students with credit for both MATH 021 and 022 who intend to pursue a major <br> requiring advanced Calculus. |
| Course Description: | Vectors in space; partial derivatives; Lagrange multipliers; multiple integrals; <br> vector analysis; line integrals; Green's Theorem, Gauss's Theorem. |


| MATH 052: Survey of Calculus II <br> $\mathbf{3}$ credits, Fall \& Spring semester |  |
| :---: | :--- |
| Who should take this <br> course? | For students with credit for MATH 021 or 051 who intend to pursue a major <br> requiring advanced Calculus. |
| Course Description: | Techniques of integration. Differential equations. Probability and calculus. Partial <br> derivatives and extrema. Multiple integrals and applications. |


| MATH 082: Calculus with Business Applications II |  |
| :---: | :--- |
| $\mathbf{4}$ credits, Fall semester |  | \left\lvert\, \(\left.\begin{array}{c|l|}\hline Who should take this <br>

course?\end{array} \quad $$
\begin{array}{l}\text { For students with credit for MATH } 021 \text { or } 081 \text { who intend to pursue a major } \\
\text { requiring advanced Calculus. }\end{array}
$$\right.\right]\)

## Should I take a Math course my first semester at Lehigh?

If a major you are interested in will require calculus you should take math in the fall semester. Experience indicates it is unwise to let too much time elapse between your last high school calculus or precalculus course and your first college calculus course at Lehigh. Additionally, many science courses have calculus pre- or co-requisites. For these courses you must complete or enroll in the required calculus course before adding the science course to your schedule.

If your major does not need a calculus course you may wait to fill your mathematics requirement and explore other areas during your first semesters while getting used to the expectations of college level work.

## Advanced Placement \& College Credit Chart

Please use the chart below to determine what Advanced Placement credit you may receive from various Lehigh departments. You must have your scores submitted directly to Lehigh (code 002365). Any delay in submitting your scores will impact your ability to register for courses.

International Baccalaureate: Students who earn the International Baccalaureate may be granted credit in higher-level or advanced subjects with scores of 5 or better. All students will have their credentials evaluated on an individual basis for specific course equivalency. Lehigh's Registration \& Academic Services Office must receive the Official IB transcript before credit will be assigned.

Please note: The official Advanced Placement rules and guidelines may be found in the 2024-2025 online catalog (catalog.lehigh.edu) and are subject to change annually.

| Subject | Score | Method | Credit for: |
| :---: | :---: | :---: | :---: |
| Africana Studies | 4 | AP African American Studies | AAS 091 (4 cr) |
| Art | 4 | AP Art History | ART Elective (4 cr) |
|  | 5 | AP Art History | ART 001 (4 cr) + ART 002 ( 4 cr ) |
|  | 5 | AP Studio Art Exam | ART 073 (4 cr) |
| Biology | 4 or 5 | AP Biology | BIOS 001 (4 cr) |
| Chemistry | 5 | AP Chemistry | CHM 030 ( 4 cr ) |
| Computer Science | 4 or 5 | AP Computer Science A | CSE 007 (4 cr) |
|  | 4 or 5 | AP Computer Science Principles | CSE 099 (3 cr) |
| Earth \& Environmental Science | 4 or 5 | AP Environmental Science | EES/EVST 002 (3 cr) <br> + EES 022 (1 cr Lab) |
| Economics | 4 or 5 | AP Microeconomics | ECO 099 (2 cr) |
|  | 4 or 5 | AP Macroeconomics | ECO 099 (2 cr) |
|  | 4 or 5 | Both AP Microeconomics AND AP Macroeconomics | $\begin{aligned} & \text { ECO } 001 \text { ( } 4 \text { cr) + } \\ & \text { ECO } 099 \text { (2 cr) } \end{aligned}$ |
| English | 4 | AP English Literature \& Composition OR AP English Language \& Composition | WRT 001 (3 cr) |
|  | 5* | AP English Literature \& Composition OR AP English Language \& Composition | WRT 0013 cr) + WRT 002 ( 3 cr )* |
|  | 5 | International Baccalaureate HL Exam | WRT 001 (3 cr) |

[^1]| Subject | Score | Method | Credit for: |
| :---: | :---: | :---: | :---: |
| Global Studies | 4 | AP Human Geography | GS 091 (4 cr) |
| History | 5 | AP American History | HIST Elective ( 4 cr , SS Distribution Req) |
|  | 5 | AP European History | HIST Elective (4 cr, SS Distribution Req) |
|  | 5 | AP World History | HIST Elective ( 4 cr , SS Distribution Req) |
| Mathematics | 4 or 5 | AP Calculus AB Exam <br> *or an $A B$ subscore of 4 or 5 on the AP Calculus BC Exam | MATH 021 (4 cr) |
|  | 4 or 5 | AP Calculus BC Exam | $\text { MATH } 021 \text { ( } 4 \mathrm{cr} \text { ) + }$ $\text { MATH } 022 \text { ( } 4 \mathrm{cr} \text { ) }$ |
|  | 5 | International Baccalaureate High-Level Exam | MATH 021 (4 cr) |
|  | 4 or 5 | AP Statistics | MATH 012 (4 cr) |
| Modern Languages \& Literatures | 4 | Any of the AP Language \& Culture subject exams | Interm Level I (4 cr) |
|  | 5 | Any of the AP Language \& Culture subject exams | Interm Level I (4 cr) + Interm Level II (4 cr) |
|  | 4 or 5 | AP Spanish Literature \& Culture | SPAN 151 (4 cr) |
| Music | 5 | AP Music Theory | MUS Elective (2 cr) |
| Physics | 5 | AP Physics 1: Algebra-Based | $\begin{array}{\|l} \text { PHY } 011 \text { (4 cr) + } \\ \text { PHY } 012 \text { (1 cr Lab) } \end{array}$ |
|  | 4 or 5 | AP Physics C: Mechanics | $\begin{array}{\|l} \text { PHY } 011 \text { (4 cr) + } \\ \text { PHY } 012 \text { (1 cr Lab) } \end{array}$ |
|  | 4 or 5* | AP Physics C: Electricity \& Magnetism *Only eligible if student also receives AP credit for PHY 011 | *PHY 021 (4 cr) + PHY 022 ( 1 cr Lab) |
| Political Science | 4 or 5 | AP United States Government \& Politics | POLS 001 (4 cr) |
|  | 4 or 5 | AP Comparative Government \& Politics | POLS 003 (4 cr) |
| Psychology | 4 or 5 | AP Psychology | PSYC 001 (4 cr) |

## Pre-Health Information

Medical, dental, and other health professional schools are looking for students who have pursued a challenging and well-rounded education, and who have successfully completed the necessary prerequisite coursework. No specific major is required for pre-health track students. Students who indicate interest in pursuing a pre-health track will automatically be enrolled in the Pre-Health Advising CourseSite, which will provide you helpful information and resources to support you as a pre-health track student at Lehigh. Appointments with the Med Mentors or the Pre-Health Director, Autumn Moser, may also be scheduled through your Handshake account (https://lehigh.joinhandshake.com).

Sample first-year schedule for pre-health track:

| FALL semester first year | Credits | SPRING semester first year | Credits |
| :--- | :---: | :--- | :--- |
| WRT 001 | 3 | WRT 002 (or WRT 011 if placed out of <br> WRT 002) | 3 |
| Big Questions Seminar | 3 or 4 | MATH 052 or 022 |  |
| MATH 051 or 021 | 4 | CHM 031 or 041 | 4 or 4 |
| CHM 030 or 040 (or 031 if AP) | 4 | BIOS 041 + 042L (or 043L) | 4 |

> AP credits and pre-health: AP credits are generally accepted by medical schools, with more advanced study in that discipline suggested (consult with the pre-health director).
$>$ Biology and pre-health: Lehigh's introductory biology course and lab (BIOS $041+042 \mathrm{~L}$ : Bio Core I: Cellular \& Molecular Biology) are offered only in the spring semester. CHM 030 or 040 is a pre-requisite for BIOS $041+$ 042L.
$>$ Calculus and pre-health: Both the 20 and the 50 series of calculus are appropriate for pre-health students. If students plan to major in a discipline that requires upper-level calculus courses (e.g., Calc III), then the 20 series must be taken.
> Chemistry and pre-health: Both the 30 and the 40 series of Chemistry are appropriate for pre-health students. Note: CHM 030 and CHM 031 are both offered in the fall and the spring semesters. CHM 040 is offered in the fall semester, and CHM 041 is offered in the spring.
$>$ The "traditional" timeline of matriculating to health professional school directly after graduation is no longer followed by the majority of Lehigh and national applicants. Students typically apply to medical school after graduation and take a gap or bridge year to gain more experience. Waiting does not impact the success of the application.

| Sample 4-year schedule to show placement of necessary courses for direct matriculation to med school* |  |  |
| :---: | :---: | :---: |
| First Year | CHM 030 or $040+031$ or 041 | BIOS 041 + 042L |
|  | ENGL $001+002$ or 011 | MATH 051 or $021+052$ or 022 |
| Sophomore Year | CHM 110 + 111L + $112+113 \mathrm{~L}$ | BIOS 115 + 116L |
|  | BIOS $044+045 \mathrm{~L}$ | Statistics |
|  | SOC 001 |  |
| Junior Year | PHY 010/011 + 012L + 013/021 + 022L | BIOS $371+372$ |
|  | PSYC 001 | MCAT in spring /summer |
|  | Lehigh Committee Process (for institutional letter of support) |  |
| Junior/Senior Summer | Submit primary and secondary applications to medical school |  |
| Senior Year | Interviews throughout. Decisions from October to the following summer. |  |

*Requirements for at least one degree program and the college distribution requirements must also be satisfied!

Introductory prerequisite and corequisite courses to remember:

| For: | Prerequisite(s) | Or corequisite |
| :---: | :---: | :---: |
| BIOS 041 | CHM 030 or 040 | CHM 030 or 040 (not recommended) |
| BIOS 042 (Lab) | BIOS 041 | BIOS 041 (recommended) |
| BIOS 115 | BIOS 041 |  |
| BIOS 116 | BIOS 115 | BIOS 115 (recommended) |
| BIOS 044 | BIOS $041+042$ or 043 (Lab) |  |
| BIOS 045 (Lab) | BIOS 044 | BIOS 044 (recommended) |
| CHM 031 or 041 | CHM 030 or 040 and MATH 021, 031, 051, or $075+076$ |  |
| CHM 110 | CHM 031 or 041 |  |
| CHM 111 (Lab) | CHM 110 | CHM 110 (recommended) |
| PHY 010 or 011 | MATH 021, 031, 051, or $075+076$ | MATH 021, 031, 051, or $075+076$ |
| PHY 012 (Lab) | PHY 010 or 011 | PHY 010 or 011 (recommended) |
| PHY 013 | $\text { PHY } 010 \text { or } 011 \text { and MATH 021, 031, 051, or }$ $075+076$ | MATH 021, 031, 051, or $075+076$ |
| PHY 021 | PHY 010 or 011 and MATH 022, 032, or 052 |  |
| PHY 022 (Lab) | PHY 012 and PHY 031 or 021 | PHY 013 or 021 (recommended) |

List of courses needed to prepare for MCAT and fulfill requirements for most US medical $\dagger$
schools (asterisked courses typically taken in *first year or **second year)

| Biology (3 semesters) | *BIOS 041/042L (4) + **BIOS 115/116L (4) + 044/045L (4) |
| :---: | :---: |
| Chemistry (2 semesters) | *CHM 030 or 040 (4) + CHM 031 or 041 (4) |
| Organic Chemistry (2 semesters) | ${ }^{* *} \mathrm{CHM}$ 110/111L (4) + 112/113L (4) |
| Physics (2 semesters) | PHY 011 or $010+012 \mathrm{~L}(5)+$ PHY 021 or $013+022 \mathrm{~L}$ (5) |
| Biochemistry (2 semesters) | BIOS 371 (3) + 372 (3) |
| Calculus (2 semesters recommended) | *MATH 051 or 021 (4) + MATH 052 (3) or 022 (4) |
| Statistics (1 semester) | MATH 012 (4) or department-specific statistics course(s) (e.g., BIOS 130) |
| Psychology (1 semester) | PSYC 001 (4) |
| Sociology (1 semester) | SOC 001 (4) or HMS minor |
| English (2 semesters) | *ENGL 001 + 002 (6) OR ENGL 001 (AP) + 011 (6) |

$\dagger$ Dental and other health professional programs have similar requirements.

## Pre-Law Information

Following the recommendations of the Association of American Law Schools, Lehigh does not have a prescribed pre-law curriculum or major. You may foster the relevant skills in critical analysis, logical reasoning, and communication through challenging coursework of significant breadth and depth in all majors at Lehigh. Courses that emphasize reading and writing, analytical thinking, and public speaking will help to develop the skills necessary to succeed in law school. For those interested students, law-related courses are offered in the College of Arts and Sciences (Constitutional Law, Civil Rights and Civil Liberties, Law and Order) and the College of Business and Economics (Introduction to Law and Legal Environment of Business). Contact the pre-law advisor for enrollment in the Pre-Law Advising Course Site; appointments may also be scheduled through your Handshake account (https://lehigh.joinhandshake.com).

## Big Questions Seminars Fall 2024

You will need to register for a Big Questions Seminar in your first fall semester. These courses address a wide range of engaging subjects in a small classroom setting and are taught by some of Lehigh's very best faculty. One of the primary goals of these seminars is to assist you in transitioning from high school to college, with an eye toward critical thinking and active classroom participation.

Detailed course descriptions, additions to this list, and brief biographies of the instructors are available via go.lehigh.edu/BigQuestionsSeminars.

We encourage you to review all of the course descriptions in this year's Big Questions Seminar Program. We advise that you select a seminar in a subject area different from that of your intended major to construct a schedule that allows you to explore. We ask you to consider several seminars as they have limited enrollment capacity and they may have time conflicts with your other fall courses.

| Department | Course Title |
| :--- | :--- |
| ANTH 090-012 (IR 090-012) | Culture Wars: Who starts them and why? |
| ART 090-011 (PSYC 090-011) | What is Reality? |
| ART 090-012 (EVST 090-012) | Can Art Inspire Climate Change Action? |
| ARTS 090-010 | How should we remember?: The case of slavery in <br> early Bethlehem |
| BIOS 090-010 | How Can We Harness the Oceans to Solve Societal <br> Needs? |
| BIOS 090-020 | Who are the Women in Science? |
| CHM 090-016 (ENGL 090-016) | How Do Explosives Catalyze Change? |
| COMM 090-010 | In AI We (Dis)Trust? |
| COMM 090-011 (AAS 090-011, LAS 090-11) | What is the media's role in constructing racial <br> identity? |
| DES 090-018 (THTR 090-018) | How Will Media Make the Future? |
| EES 090-010 | How Hot is Too Hot? From Ice Age to Greenhouse <br> Earth |
| ENGL 090-015 (THTR 090-015) | All Fun \& Games: How Does Play Change Us? |
| HIST 090-010 | Prisons \& Policing? |
| HIST 090-011 (ASIA 090-011, HIST 090-011) | Is the Future of Humanity Asian? |
| MATH 090-010 | Can mathematics be used to improve democracy? |
| MLL 090-010 (GS 090-010) | Is Censorship Necessary? |
| MLL 090-012 (FILM 090-012, GS 090-012) | How Has Photography Changed the World? |
| MLL 090-013 | What is the Legacy of the French Empire? |
| MUS 090-011 (THTR 090-011) | 09n American musical theatre promote social |


|  | justice? |
| :--- | :--- |
| PHIL 090-010 | How ought we live with AI? |
| PHIL 090-012 (POLS 090-012) | What is Nationalism? |
| PHY 090-010 (EVST 090-010) | Ghosts of Chernobyl: Do the benefits of nuclear <br> energy outweigh its risks? |
| POLS 090-011 (SOC 090-011) | What Can Pop Culture Teach Us About Politics? |
| PSYC 090-010 | What Makes for a Meaningful Life? |
| REL 090-010 (POLS 090-010) | Are Children People? |
| SOC 090-014 (HMS 090-014) | How Did Opioids Become an Epidemic? |
| THTR 090-016 (SOC 090-016, DES 090-016) | How can we use Design as Activism to affect social <br> change? |


[^0]:    *Example: If you are following the Pre-Health track or pursuing a major in the Biological Sciences or Chemistry, you are required to take CHM 030: Introduction to Chemical Principles or CHM 040: Honors General Chemistry I, in your fall semester. You should register for a section of that course first, then the appropriate Math, then a first-year seminar and finally a section of First-Year Writing (WRT 001, WRT 002, or WRT 011).

[^1]:    *Students in the College of Arts \& Sciences who provide credit for both WRT $001+002$ will take WRT 011 to fulfill the First-Year Writing requirement.

