Bachelor of Science in Biology Pre-Health Professions Track (122Cr.) Four-Year Curriculum Plan

Suggested four-year plan for freshmen entering LMU Fall 2021. Always consult LMU's Undergraduate Catalog and discuss with your academic advisor every semester prior to registering for classes. Timing of courses may deviate from this plan based on a number of factors

| First Year - Fall Semester | Cr. |
| :---: | :---: |
| ENGL 101 Composition ${ }^{*}$ | 3 |
| UACT 100 Strategies for College Success* | 1 |
| BIOL 111 General Biology I \& Lab** Prerequisite: Successul Completion ( $C$ - or betere) BIOL 100 , placement in ENGL 101, OR ACT/SAT Teading verpal score of 23 | 4 |
| MATH 120 Trigonometry** <br> Prerequisite: Successful completion (C- or better) of MATH 115, OR Math ACT sub-score of 23 or higher | 3 |
| BIOL 194 Pre-Med Seminar ${ }^{\#}$ | 1 |
| CHEM 111 General Chemistry I \& Lab ${ }^{\#}$ <br> Prerequisite: Successful completion (C o or better) of Math 105,115, or 120 , OR Math ACT sub-score of 23 higher, Fall | 4 |
| Total Credits | 16 |
| - You should be exploring opportunities to participate in service initiatives <br> - Have you joined the Pre-Med Club? |  |
| Second Year - Fall Semester | Cr. |
| ISYS 100 Computer Literacy* | 2 |
| PSYC 100 Intro to Psychology ${ }^{* *}$ | 3 |
| BIOL 315 Molecular Genetics \& Lab ${ }^{\text {\# }}$ Prerequisite: Successful completion (C-or better) of fiol 111 and 112 with labs and CHEM 111 with labs | 4 |
| CHEM 221 Organic Chemistry I \& Lab ${ }^{\#}$ <br> Prerequisiste : Successtul completion (C-or better) of CHEM 112 with lab, Fall | 4 |
| PHYS 211 General Physics I \& Lab ${ }^{\text {\# }}$ <br> Prerequisite: Successful completion (C- or better) in MATH 120, or a Math ACT sub-score of 26 or higher, Fall | 4 |
| Total Credits | 17 |
| - You should be exploring opportunities to volunteer and get involved in activer on campus including leadership roles. <br> - Keep track of the number of 300/400 level courses you take. You need to complete at least 42 credits for graduation |  |
| Third Year- Fall Semester | Cr. |
| History Requirement* | 3 |
| Fine Arts Requirement* | 3 |
| ENGL 240 or $250{ }^{*}$ | 3 |
| BIOL 441 Biochemistry $I^{\#}$ <br> Prerequisite: Successful completion (C- or better) of BIOL 111 with lab and CHEM 221 and 222 with labs, Fall | 4 |
| BIOL 310 Comp. Vert. Anatomy \& Lab ${ }^{\text {\# }}$ Prereauisite: Successful completion ( $C$-or better) of BBoL 111 and 112 and CHEM 111 and 112 with lass, Fall | 4 |

Total Credits 17

- Make plans to prepare and take graduate/professional school entrance exams (e.g., DAT, GRE, MCAT, PA-CAT, OAT)
- Start thinking about who you would like to write you a letter of recommendation

| Fourth Year - Fall Semester | Cr. |
| :---: | :---: |
| CIVX 300 American Civics* | 2 |

PHIL 430 Medical Ethics* ${ }^{*} 3$
Prerequiste: Successful Completion (C-or better) of ENGL 240 or 250
Upper-Level Track Elective $(3-4 \mathrm{cr})^{\#} \quad 4$
See page 2 for choices
Upper-Level Track Elective $(3-4 \mathrm{cr})^{\#} \quad 4$
See page 2 for choices
Total Credits 13

- Submit application to graduate/professional school
- Conduct a mock interview
- Complete the Intent to Graduate form after you have registered for your spring semester
- Participate in a research project

| First Year - Spring Semester | Cr. |
| :---: | :---: |
| ENGL 102 Composition II* | 3 |
| LNCN 100 Lincoln's Life \& Legacy* | 1 |
| BIOL 112 General Biology II \& Lab* ${ }^{*}$ <br> Prerequisite: Successful completion (C- or better) of BIOL 111 with lab | 4 |
| CHEM 112 General Chemistry II \& Lab ${ }^{\#}$ <br> Prereauisite: Successful completion (C-or better) of chem 111 with lab, Spring | 4 |
| MATH 270 Probability \& Statistics\# Prerequisite for BIOL 380 | 3 |

## Total Credits 15

- Explore which graduate/professional school entrance exams you will need to take (e.g., DAT, GRE, MCAT, PA-CAT, OAT)
- Seek shadowing and/or volunteer opportunities during the summer.

| Second Year - Spring Semester | Cr. |
| :---: | :---: |
| COMM 200 Fund Speech \& Communication* | 3 |
| SOCI 100 Intro to Sociology** | 3 |
| BIOL 380 Research Design \& Analysis\# <br> Prerequisite: Successful completion (C- or better) of MATH 270 and BIOL 111 and 112 with labs | 3 |
| CHEM 222 Organic Chemistry II \& Lab ${ }^{\text {\# }}$ <br> Prerequisite: Successful completion (C-or better) of C CHEM 221 with ab, Spring | 4 |
| PHYS 212 General Physics II \& Lab ${ }^{\text {\# }}$ <br> Prerequisite: Successful completion (C- or better) in PHYS 211 with lab, Spring | 4 |
| Total Credits 17 |  |
| - Plan out your last four semesters - think about what classes you need to prepare for your entrance exam; these should be completed by the end of your third year <br> - Keep track of the number of hours you are completing in volunteer experiences and shadowing |  |
| Third Year - Spring Semester | Cr. |
| History Requirement* | 3 |
| 300-level PSYC\# | 3 |
| BIOL 387/X JR Pre-Med Sc Sem and Writing ${ }^{\#}$ Prerequisite: Successful completion (c- or better) of ENGL 102 or equivalent | 1 |
| Molecular and Cell Elective Course ${ }^{\#}$ See page 2 for choices | 4 |
| Organismic Elective Course ${ }^{\#}$ See page 2 for choices | 4 |


| Total Credits 15 |
| :--- |
| - Explore opportunities to conduct research in your fourth year |
| - Schedule your graduate/professional school entrance exams (e.g., DAT, GRE, MCAT, PA- |
| CAT, OAT) date for the summer and begin studying |
| - Identify writers for letters of recommendation and ask them before leaving for the |
| summer |


| Fourth Year - Spring Semester | Cr. |
| :---: | :---: |
| Elective - Any course of your choice | 3 |
| BIOL 487/Z Sr Pre-Med Sc Sem \& Writing\# Prerequisite: Successful completion (B- or better) of BIOL 387 | 1 |
| $\underset{\text { See page 2for chices }}{\text { Uppel }}$ Track Elective ( $3-4 \mathrm{cr})^{\text {\# }}$ | 4 |
| Upper-Level Track Elective (3-4 cr) ${ }^{\text {\# }}$ See page 2 for choices | 4 |

- Participate in a research project. Explore opportunities to present
- Explore gap year options, if applicable
*LMU Core Curriculum Requirement: See LMU undergraduate catalog for details
\# Major-Specific Requirement/Collateral Requirement: These courses must be passed with at least a C- or better to progress in the program. See LMU catalog for specific grade requirements.


## Course Options for Program Track Electives

Required to take at least $\mathbf{2 3}$ credit hours

| Organismic Elective Course <br> Must select one of the following courses | Cr. |
| :---: | :---: |
| BIOL 336 General Microbiology <br> Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs and CHEM 111 and 112 with labs, Spring | 4 |
| BIOL 365 General Physiology <br> Prerequisite: Successful Completion (C- or better) BIOL 310 lecture with lab, Spring | 4 |
| PEXS 300 Physiology of Exercise | 3 |
| VHS 300 Vet Parasitology \& Entomology <br> Prerequisite: Successful Completion (C- or better) of BIOL 112 with lab; Junior Standing, Fall | 4 |
| - If the course has a corresponding laboratory course, the laboratory course MUST be taken <br> - Must be passed with a C - or better to progress in the program. |  |
| Upper-Level Track Electives <br> Must select at least three of the following courses | Cr. |
| AHSC 300 Medical Terminology | 3 |
| BIOL 320 Principles of Botany <br> Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Spring | 4 |
| BIOL 334 General Histology <br> Prerequisite: Successful completion (C- or better) of BIOL 310, Spring | 2 |
| BIOL 336 General Microbiology <br> Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs and CHEM 111 and 112 with labs, Spring | 4 |
| BIOL 360 Immunology <br> Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs and CHEM 111 and 112 with labs, Fall | 3 |
| BIOL 365 General Physiology <br> Prerequisite: Successful completion of BIOL 310 with lab, Spring | 4 |
| BIOL 370 Ecology | 4 |
| Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Fall |  |
| BIOL 410 Evolution <br> Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Spring odd years | 3 |
| BIOL 411 Advanced Human Anatomy <br> Prerequisite: Successful completion (B- or better) of BIOL 311 and 312 with labs AND consent of instructor, Spring | 4 |
| BIOL 442 Biochemistry II <br> Prerequisite: Successful completion (C- or better) of BIOL 441, Spring | 4 |
| BIOL 450 Molecular Cell Biology <br> Prerequisite: Successful completion (C- or better) of BIOL 315 with lab and BIOL 441, Spring | 4 |
| BIOL 460 Developmental Biology <br> Prerequisite: Successful completion (C- or better) of BIOL 310 with lab and BIOL 315 with lab, Spring odd years | 3 |
| BIOL 483 Research in Biology (max 3) <br> Prerequisite: Junior standing and consent of faculty supervisor, Fall/Spring/Summer | 1-3 |
| PEXS 300 Physiology of Exercise Fall | 3 |
| PEXS 372 Kinesiology and Biomechanics Prerequisite: MATH, Spring | 3 |
| PSYC 475 Neuropsychology <br> Prerequisite: PSYC 100, Fall | 3 |
| VHS 300 Vet Parasitology \&Entomology <br> Prerequisite: BIOL 112; Junior Standing, Fall | 4 |
| VHS 330 One Health <br> Prerequisite: ENGL 102 and Junior Standing, Fall | 3 |
| VHS 400 Zoonotic Diseases Vet/Publ. Hlth <br> Prerequisite: BIOL 112 and Junior Standing, Fall online | 3 |
| - Course cannot count for the Molecular/Cell or Organismic level and upper level <br> - If the course has a corresponding laboratory course, the laboratory course MUST be taken <br> - Must be passed with a C - or better to progress in the program. |  |


| Molecular and Cell Courses Must select one of the following courses | Cr. |
| :---: | :---: |
| BIOL 360 Immunology Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs and CHEM 111 and 112 with labs, Fall | 3 |
| BIOL 442 Biochemistry II <br> Prerequisite: Successful completion (C- or better) of BIOL 441, Sprin | 4 |
| BIOL 450 Molecular Cell Biology Prerequisite: Successful completion (C- or better) of BIOL 315 with lab and BIOL 441, Spring | 3 |
| - If the course has a corresponding laboratory course, the laboratory cour taken <br> - Must be passed with a C - or better to progress in the program. |  |

Credit Hour Requirements
In order to graduate you need to complete a minimum of 122 credit hours. At least 42 of these hours must be at the 300/400 level. Track your hours in each of these categories as you progress to ensure timely completion of the program.

| Semester | \# of credit hours |  |  |  | Cumulative GPA |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current semester | 300/400 | Total Earned (Add all semesters) | $\begin{gathered} \hline \text { Total } \\ 300 / 400 \\ \text { (Add all } \\ \text { semesters) } \\ \hline \end{gathered}$ |  |
| $1^{\text {st }}$ Yr. Fall |  |  |  |  |  |
| $1^{\text {st }} \mathrm{Yr} .$ <br> Spring |  |  |  |  |  |
| $2^{\text {nd }} \mathrm{Yr} .$ <br> Fall |  |  |  |  |  |
| $2^{\text {nd }} \mathrm{Yr}$. <br> Spring |  |  |  |  |  |
| $3^{\text {rd }}$ Yr. Fall |  |  |  |  |  |
| $3^{\text {rd }} \mathrm{Yr} .$ <br> Spring |  |  |  |  |  |
| $4^{\text {th }}$ Yr. Fall |  |  |  |  |  |
| $4^{\text {th }} \mathrm{Yr}$. <br> Spring |  |  |  |  |  |

Professional Tracking

|  | Average | You |
| :---: | :---: | :---: |
| Entrance exam |  |  |
| Cumulative GPA |  |  |
| Science GPA |  |  |
| Shadowing hours |  |  |
| Volunteer hours |  |  |
| Other: |  |  |
| Other: |  |  |
| Other: |  |  |

Alternative Paths: $\qquad$

