PREPARATION FOR ALLOPATHIC MEDICAL SCHOOL (Tentative time-line)

- Choose a major you enjoy
- Visit the CSUS pre-health Home Page: www.csus.edu/prehealth/index.stm
- print the “Time Line for Application/Admission” from the web site of the Association of American Medical Colleges at: www.aamc.org
- Complete the pre-requisite courses for medical school
  o it is important to check with each school – the suggested required courses on the following page is what MOST medical schools require. Some medical schools may have additional requirements.
    ▪ Detailed information about specific medical schools and their prerequisites can be found in the annual publication of the Association of American Medical Colleges (AAMC): Medical School Admission Requirements (MSAR): www.aamc.org/students/applying/requirements/62892/msar/ (a copy is available in the NSAC office, SQU 238)
- Sign up for extracurricular activities such as internships, volunteer work and research opportunities; clinical experience is required by most schools
- Join campus clubs and organizations such as AMSA ARC Pre-Medical Student Chapter (http://sacstate.orgsync.com/org/cusamsa) and MOSS; Multicultural Organization of Science Students (http://www.csus.edu/nsm/see/mosslink.htm), and get involved in the community:
  o The Sac State BioCorps can be a great way to get involved: http://sacstate.orgsync.com/org/biocorps
- begin working on your personal statement
- Study for and take the Medical College Admission Test (MCAT) during the spring (May) of the year you plan to apply (summer at the latest)
  o MCAT information site: www.aamc.org/students/applying/mcat
    ▪ The 2013 MCAT will no longer contain a writing section; instead there will be a trial section (Psychology, Sociology and Humanities). This trial section will be optional.
    ▪ The 2015 MCAT will require students to have taken courses in Biochemistry, Psychology, Sociology and Stats, in addition to general biology, chemistry, organic chemistry and physics.
    ▪ AAMC will release 1 practice test for the 2015 MCAT, in Spring 2014- following that, 2 practice tests will be available.
- Select schools
- Select faculty members that will write your letters of recommendation
  o If choosing a committee letter, then select the faculty member that will chair your committee
  o Many schools will accept letters of recommendation processed through The American Medical College Application Service (AMCAS): www.aamc.org/amcas
  o Letters can be submitted electronically to AMCAS, through veClient (VirtualEvals): www.virtualevals.org/receivers/, interfolio: www.interfolio.com/, U.S. mail or the AMCAS Letter WRitter Application.
- The American Medical College Application Service (AMCAS) is a centralized application processing service. Applications will be available early May, and AMCAS will accept applications starting June 1. Students are encouraged to apply early since most schools accept students on a “rolling admission” basis. Have a copy of your unofficial transcripts when completing the application.
  o Early decision program deadline is August 1 (decisions are made by October 1)
  o Regular deadlines range from October to December
- Arrange to have official transcripts sent to AMCAS
- Secondary applications will be requested by the individual medical schools in July/August. Letters of recommendation will be sent out at this time
- Interviews
- Visit the web site of the Association of American Medical Colleges at: www.aamc.org for information about the MCAT and the AMCAS, along with other helpful information about preparing for and applying to medical school.
Required Courses for MOST Allopathic Medical Schools

BIO 1: Biodiversity, Evolution & Ecology
BIO 2: Cells, Molecules & Genes
CHEM 1A: General Chemistry
CHEM 1B: General Chemistry
CHEM 24: Organic Chemistry I
CHEM 124: Organic Chemistry II
CHEM 25: Organic Chemistry Lab
CHEM 161: Biochemistry (required by some schools)
PHYS 5A: General Physics I
PHYS 5B: General Physics II
MATH 26A: Calculus I (required by some schools; even fewer schools require a year of math)
STAT 1: Introduction to Statistics: (preferred by some schools; for some schools it fulfills a portion of a 1 year math requirement)
ENG 1A: College composition
ENG 20: College Composition

Recommended Upper Division Electives:

BIO 131: Systemic Physiology
BIO 184: Genetics (required by some schools)
BIO 121: Molecular and Cell Biology (required by some schools)
BIO 195: Internships

Recommended General Education Courses (courses in bold are REQUIRED by most schools):

AREA A
A1: COMS 4: Introduction to public speaking
A2: ENG 1A: College Composition
A3: PHIL 4: Critical Thinking

AREA B  Met by pre-med science prerequisites

AREA C
C1: ANY
C2: ANY
C3: PHIL 2: Ethics
C4: ANY

AREA D
D1: PSYCH 2: Introduction to Psychology
SOC 1: Introduction to Sociology
D2: ANTH 101: Cultural Diversity (writing intensive course)
ETHN 100: Ethnic America (writing intensive course)
PHIL 101: Ethics & Social Issues (writing intensive course)
PHIL 104: Bioethics
SOC 120: Ethnic and Race Relations
SWRK 151: Health Services and Systems
D3: GOV 1 or GOV 150 &
HIST 17A or 17 B
HLSC 124: Consumer Health Education
HLSC 134: Understanding Human Sexuality
NURS 160: Human Sexuality
PHIL 100: Ethics and Personal Values
PSYCH 151: Psychological Aspects of Death/ Dying

Natural Sciences Advising Center – Doctor of Medicine (MD)- Updated September 2012
PREPARATION FOR OSTEOPATHIC MEDICAL SCHOOL (Tentative time-line)

- Choose a major you enjoy
- Visit the CSUS pre-health Home Page: www.csus.edu/prehealth/index.stm
- Complete the pre-requisite courses for medical school
  - it is important to check with each school – the suggested required courses on the following page is what MOST medical schools require. Some medical schools may have additional requirements.
    - Detailed information about specific medical schools and their prerequisites can be found in the annual publication of the American Association of Colleges of Osteopathic Medicine (AACOM): Osteopathic Medical Colleges Information Book, available online & in the NSAC office (SQU 238)
- Sign up for extracurricular activities such as internships, volunteer work and research opportunities; clinical experience is required by most schools
- Join campus clubs and organizations such as AMSA ARC Pre-Medical Student Chapter (http://sacstate.orgsync.com/org/csusamsa) and MOSS; Multicultural Organization of Science Students (http://www.csus.edu/nsm/see/mosslink.htm), and get involved in the community:
  - The Sac State BioCorps can be a great way to get involved: http://sacstate.orgsync.com/org/biocorps
- Study for and take the Medical College Admission Test (MCAT) during the spring of the year you plan to apply (summer at the latest)
  - Students may apply prior to taking the MCAT
  - MCAT information site: www.aamc.org/students/applying/mcat
    - The 2013 MCAT will no longer contain a writing section; instead there will be a trial section (Psychology, Sociology and Humanities). This trial section will be optional.
    - The 2015 MCAT will require students to have taken courses in Biochemistry, Psychology, Sociology and Stats, in addition to general biology, chemistry, organic chemistry and physics.
    - AAMC will release 1 practice test for the 2015 MCAT, in Spring 2014- following that, 2 practice tests will be available.
- Select schools
- Select faculty members that will write your letters of recommendation
  - If choosing a committee letter, then select the faculty member that will chair your committee
  - One letter must be from a practicing doctor of osteopathic medicine
  - Letters should be sent directly to the individual colleges.
    - Almost all osteopathic medical schools accept letters via veClient (VirtualEvals): www.virtualevals.org/receivers/
- The American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS): www.aacom.org is a centralized application processing service. The applications will be available the beginning of May, with submission date of June 1 and deadlines ranging from October to April. Students are encouraged to apply early.
  - Have a copy of your unofficial transcripts when completing the application
- Interviews
- Other helpful sites: Student Osteopathic Medical Association (SOMA): www.studentdo.com
Required Courses for MOST Osteopathic Medical Schools

BIO 1: Biodiversity, Evolution & Ecology
BIO 2: Cells, Molecules & Genes
CHEM 1A: General Chemistry
CHEM 1B: General Chemistry
CHEM 24: Organic chemistry I
CHEM 124: Organic Chemistry II
CHEM 25: Organic Chemistry Lab
CHEM 161: Biochemistry (required by some schools)
PHYS 5A: General Physics I
PHYS 5B: General Physics II
MATH 26A: Calculus I (required by some schools; even fewer schools require a year of math)
STAT 1: Introduction to Statistics (preferred by some schools; for some schools it fulfills a portion of a 1 year math requirement)
ENG 1A: College composition
ENG 20: College Composition

Recommended Upper Division Electives:
BIO 131: Systemic Physiology
BIO 184: Genetics
BIO 195: Internships

Recommended General Education Courses (courses in bold are REQUIRED by most schools):

AREA A
A1: COMS 4: Introduction to public speaking
A2: ENG 1A: College Composition
A3: PHIL 4: Critical Thinking

AREA B  Met by pre-med science prerequisites

AREA C
C1: ANY
C2: ANY
C3: PHIL 2: Ethics
C4: ANY

AREA D
D1: PSYCH 2: Introduction to Psychology
SOC 1: Introduction to Sociology
D2: ANTH 101: Cultural Diversity (writing intensive course)
ETHN 100: Ethnic America (writing intensive course)
PHIL 101: Ethics & Social Issues (writing intensive course)
PHIL 104: Bioethics
SOC 120: Ethnic and Race Relations
SWRK 151: Health Services and Systems
D3: GOV 1 or GOV 150 &
HIST 17A or 17 B

AREA E
HLSC 124: Consumer Health Education
HLSC 134: Understanding Human Sexuality
NURS 160: Human Sexuality
PHIL 100: Ethics and Personal Values
PSYCH 151: Psychological Aspects of Death/ Dying

Natural Sciences Advising Center- Doctor of Osteopathic Medicine (DO)- Updated September 2012
PREPARATION FOR DENTAL SCHOOL (Tentative time-line)

- Choose a major that you are interested in and that fulfills most of the prerequisite within the major. The most common majors are Biology and Chemistry.

- Visit the CSUS pre-health Home Page: www.csus.edu/prehealth/index.stm

- Complete the pre-requisite courses for dental school
  
  o it is important to check with each school – the suggested required courses on the following page is what MOST dental schools require. Some dental schools may have additional requirements.
    
    ▪ Detailed information about specific dental schools and their prerequisites can be found in the annual publication of the American Dental Education Association (ADEA): Official Guide to Dental Schools (OGDS), available in the NSAC office (SQU 238)

- Sign up for extracurricular activities such as internships, volunteer work and research opportunities. Total community service hours are very important.
  
  o Look into taking Bio 195D (Dental Internship) – Please contact Svetlana Guevara-Lara at sc833@saclink.csus.edu.
  
  o It is highly recommended that you keep track of your hours (it will make it easier when it is time to apply)

- Join campus clubs and organizations such as the CSUS Pre-Dental Association (website: http://www.csus.edu/org/predental/index.html - face book page: http://www.facebook.com/csuspredental ) and MOSS; Multicultural Organization of Science Students (http://www.csus.edu/nsm/see/mosslink.htm )

- begin working on your personal statement (essay)

- Study for and take the Dental Admission Test (DAT) one year prior to the start of dental school (best to take in early spring). Visit www.ada.org/prof/ed/testing/dat/index.asp for more information.

- Select schools

- Select faculty members that will write your letters of evaluation
  
  o Most schools prefer letters be submitted electronically to The Associated American Dental Schools Application Service (AADSAS): www.adea.org
  
  o Committee letters are preferred (but not required) by most schools. If choosing a committee letter, please allow several months for the process.
  
  o Up to 4 individual letters or 1 committee letter plus 1 individual letter, can be submitted.

- The Associated American Dental Schools Application Service (AADSAS) is a centralized application service used by about 59 dental schools. The AADSAS Application is available in early June. The deadline for application submission depends on the individual schools. Students are encouraged to apply early since most schools accept students on a “rolling admission” basis.

- Arrange to have official transcripts sent to AADSAS.

- Supplemental materials may be requested by various schools

- Interviews

Visit the web site of the American Dental Education Association (ADEA): www.adea.org for information about the various dental schools, DAT and the AADSAS, along with other helpful information about preparing for and applying to dental school.

Other links: American Dental Association (ADA): www.ada.org and American Student Dental Association (ASDA): www.asdanet.org
Required Courses for MOST Dental Schools:

BIO 1: Biodiversity, Evolution & Ecology
BIO 2: Cells, Molecules & Genes
CHEM 1A: General Chemistry
CHEM 24: Organic Chemistry I
CHEM 124: Organic Chemistry II
CHEM 25: Organic Chemistry Lab
CHEM 161: Biochemistry
PHYS 5A: General Physics I
PHYS 5B: General Physics II
STAT 1: Introduction to Statistics (required by some)
ENG 1A: College composition
ENG 20: College Composition

BIO 22: Human Anatomy
BIO 131: Systemic Physiology
BIO 184: Genetics

Recommended Upper Division Electives:

BIO 195D: Dental Internship
BIO 130: Histology
BIO 139: Microbiology

Bio 149A/B: Immunology
Bio 127: Developmental Biology

Recommended General Education Courses (courses in bold are REQUIRED by most schools):

A course in Business/Accounting is highly recommended.

AREA A

A1: COMS 4: Introduction to public speaking
A2: ENG 1A: College Composition
A3: PHIL 4: Critical Thinking

AREA B  Met by science prerequisites

AREA C

C1: ANY
C2: ART 20A: Beginning Drawing
C3: PHIL 2: Ethics
C4: ART 74: Beginning Jewelry Making
ART 75: Beginning Metalsmithing

AREA D

D1: PSYCH 2: Introduction to Psychology
SOC 1: Introduction to Sociology
D2: ANTH 101: Cultural Diversity (writing intensive course)
ETHN 100: Ethnic America (writing intensive course):
PHIL 101: Ethics & Social Issues (writing intensive course)
PHIL 104: Bioethics
SOC 120: Ethnic & Race Relations
SWRK 151: Health Services and Systems
D3: GOV 1 or GOV 150 &
HIST 17A or 17 B

AREA E

HLSC 124: Consumer Health Education
HLSC 134: Understanding Human Sexuality
NURS 160: Human Sexuality
PHIL 100: Ethics and Personal Values
PSYCH 151: Psychological Aspects of Death/ Dying

Natural Sciences Advising Center- Doctor of Dentistry (DDS) – Updated September 2012
PREPARATION FOR OPTOMETRY SCHOOL (Tentative time-line)

- Choose a science major such as Biology or Chemistry.
- Visit the CSUS pre-health Home Page: www.csus.edu/prehealth/index.htm
- Complete the pre-requisite courses for optometry school
  - it is important to check with each school – the suggested required courses on the following page is what MOST optometry schools require. Each school may have additional requirements.
    - Detailed information about specific optometry schools and their prerequisites can be found in the annual publication of the Association of Schools and Colleges of Optometry (ASCO): Schools and Colleges of Optometry Admission Requirements (SCOAR), at: www.opted.org, (a copy is also available in the NSAC office, SQU 238).
- Sign up for extracurricular activities such as internships, volunteer work and research opportunities
- Join campus clubs and organizations such as the CSUS Optometry Club (http://sacstate.orgsync.com/org/optclub) - Contact: optclub@csus.edu
- begin working on your personal essay
- Study for and take the Optometry Admission Test (OAT): www.opted.org/info_oat.cfm
- Select schools
- Select faculty members that will write your letters of recommendation
  - The Recommendation Request Form will be sent electronically to the Recommenders via the Optometry Centralized Application Service (OptomCAS): www.optomcas.org
  - Submit your official transcripts early, and be sure to have a copy of your transcripts when completing the application.
  - You can list up to 4 evaluators on your OptomCAS application (1 letter should be from an optometrist)
  - All letters of recommendations go directly from the recommender to OptomCAS
  - Check with the schools; some do not allow “Committee letters” while some require it.
- Twenty schools and colleges of optometry participate in the Optometry Centralized Application Service (OptomCAS). OptomCAS applications are usually available mid July, and application deadlines range from December to June. For more information visit: www.optomcas.org
- Supplemental application material may be requested by individual programs.
- Arrange to have official transcripts sent to OptomCAS
- Interviews

Visit the web site of the Association of Schools and Colleges of Optometry (ASCO) at: www.opted.org for more information about the OAT and the OptomCAS, along with other helpful information about preparing for and applying to optometry school.

Required Courses for MOST Optometry Schools:

- **BIO 1**: Biodiversity, Evolution & Ecology  
- **BIO 22**: Human Anatomy  
- **BIO 2**: Cells, Molecules & Genes  
- **BIO 131**: Systemic Physiology  
- **CHEM 1A**: General Chemistry  
- **CHEM 139**: Microbiology  
- **CHEM 1B**: General Chemistry  
- **CHEM 24**: Organic chemistry I  
- **CHEM 124**: Organic Chemistry II  
- **CHEM 25**: Organic Chemistry Lab  
- **CHEM 161**: Biochemistry  
- **PHYS 5A**: General Physics I  
- **PHYS 5B**: General Physics II  
- **MATH 26A**: Calculus I (UC Berkeley requires a full year of calculus – MATH 26B)  
- **STAT 1**: Introduction to Statistics  
- **ENG 1A**: College composition  
- **ENG 20**: College Composition

Recommended Upper Division Electives:

- **BIO 195**: Internships  
- **BIO 184**: General Genetics  
- **BIO 121**: Molecular Cell Biology

Recommended General Education Courses (courses in bold are REQUIRED by most schools):

**AREA A**

- A1:  **COMS 4**: Introduction to public speaking  
- A2:  **ENG 1A**: College Composition  
- A3:  **PHIL 4**: Critical Thinking

**AREA B**  Met by science prerequisites

**AREA C**

- C1:  ANY  
- C2:  ANY  
- C3:  PHIL 2: Ethics  
- C4:  ANY

**AREA D**

- D1:  **PSYCH 2**: Introduction to Psychology  
- D2:  **SOC 1**: Introduction to Sociology  
- D2:  **ANTH 101**: Cultural Diversity (writing intensive course)  
- **ETHN 100**: Ethnic America (writing intensive course):  
- **PHIL 101**: Ethics & Social Issues (writing intensive course)  
- **PHIL 104**: Bioethics  
- **SOC 120**: Ethnic & Race Relations  
- **SWRK 151**: Health Services and Systems  
- D3:  **GOV 1** or **GOV 150** &  
- **HIST 17A** or **17 B**

**AREA E**

- **HLSC 124**: Consumer Health Education  
- **HLSC 134**: Understanding Human Sexuality  
- **NURS 160**: Human Sexuality  
- **PHIL 100**: Ethics and Personal Values  
- **PSYCH 151**: Psychological Aspects of Death/ Dying

Natural Sciences Advising Center - Doctor of Optometry – Updated March 2012
PREPARATION FOR VETERINARY SCHOOL (Tentative time-line)

- Choose a major in the sciences, such as Biology or Chemistry
- Visit the CSUS pre-health Home Page: www.csus.edu/prehealth/index.stm
- Complete the pre-requisite courses for veterinary school
  - it is important to check with each school – the suggested required courses on the following page is what MOST schools require. Some schools may have additional requirements.
    - Detailed information about specific veterinary schools and their prerequisites can be found in the annual publication of the Association of American Veterinary Medical Colleges (AAVMC): Veterinary Medical School Admission Requirements (VMSAR), available in the NSAC office (SQU 238).
- Sign up for extracurricular activities such as internships, volunteer work and research opportunities.
- Join campus clubs and organizations such as the Pre-Vet club of Sac State (face book page: pre-vet Club of Sac State/ Contact: prevetsus@gmail.com)
- begin working on your personal statement
- Study for and take the Graduate Record Examination (GRE)
- Select schools
- Select faculty members that will write your letters of recommendation
  - Electronic letters of recommendation must be processed through the Veterinary Medical Colleges Application Service (VMCAS): www.aavmc.org/vmcas/vmcas.htm (via eLOR)
- The Veterinary Medical Colleges Application Service (VMCAS) is a centralized application processing service. Applications are available in June. All application material is due by October 1.
- Arrange to have official transcripts sent directly to the colleges.
- Supplemental applications may be requested by individual schools.
- Interviews

Visit the web site of the Association of American Veterinary Medical Colleges (AAVMC) at: www.aavmc.org for information about the VMCAS and other helpful information about preparing for and applying to medical school.

Other helpful sites: American Veterinary Medical Association (AVMA): www.avma.org, Student American Veterinary Medical Association (AVMA): www.avma.org/savma/about.asp and the UC Davis Student Chapter of the American Veterinary Medical Association (SCAVMA)
Required Courses for MOST Veterinary Schools:

BIO 1: Biodiversity, Evolution & Ecology       BIO 131: Systemic Physiology
BIO 2: Cells, Molecules & Genes       BIO 184: Genetics
CHEM 1A: General Chemistry
CHEM 1B: General Chemistry
CHEM 24: Organic chemistry I
CHEM 124: Organic Chemistry II
CHEM 25: Organic Chemistry Lab
CHEM 161: Biochemistry
PHYS 5A: General Physics I
PHYS 5B: General Physics II
ENG 1A: College composition
ENG 20: College Composition
STAT 1: Introduction to Statistics

Recommended Upper Division Electives:
BIO 195: Internships

Recommended General Education Courses (courses in bold are REQUIRED by most schools):

AREA A
A1: COMS 4: Introduction to public speaking
A2: ENG 1A: College Composition
A3: PHIL 4: Critical Thinking

AREA B  Met by science prerequisites

AREA C
C1: ANY
C2: ANY
C3: PHIL 2: Ethics
C4: ANY

AREA D
D1: PSYCH 2: Introduction to Psychology
SOC 1: Introduction to Sociology
D2: ANTH 101: Cultural Diversity (writing intensive course)
ETHN 100: Ethnic America (writing intensive course)
PHIL 101: Ethics & Social Issues (writing intensive course)
PHIL 104: Bioethics
SOC 120: Ethnic and Race Relations
SWRK 151: Health Services and Systems
D3: GOV 1 or GOV 150 &
HIST 17A or 17 B

AREA E
HLSC 124: Consumer Health Education
HLSC 134: Understanding Human Sexuality
NURS 160: Human Sexuality
PHIL 100: Ethics and Personal Values
PSYCH 151: Psychological Aspects of Death/ Dying

Natural Sciences Advising Center- Doctor of Veterinary Medicine (DVM) – Updated March 2012
PREPARATION FOR BECOMING A PHYSICIAN ASSISTANT (Tentative time-line)

- Choose a major in the sciences, such as Biology or Chemistry
- Most programs require the completion of a Bachelor’s degree.
- Visit the CSUS pre-health Home Page: www.csus.edu/prehealth/index.stm
- Complete the pre-requisite courses for the Physician Assistant Program
  o It is important to check with each school – the suggested required courses on the following page is what MOST schools require. Some schools may have additional requirements.
- Detailed information about specific Physician Assistant Programs and their prerequisites can be found in the Physician Assistant Education Association’s (PAEA) online publication: Physician Assistant Programs Directory ($35/year); NSAC advisors (SQU 238) have access to the online publication.
- Sign up for extracurricular activities such as internships, volunteer work and research opportunities; about 1,000-2000 hours of clinical experience in a health related field is required (some schools require 3,000 hours)
- Join campus clubs and organizations.
- begin working on your personal statement
- Select schools
- Only 1 California School (University of Southern CA) requires GRE or MCAT scores. Please check the requirements for all the programs you are applying to.
- Select faculty members that will write your letters of recommendation
  o Usually 3 letters are required (one must be from a physician or physician assistant)
  o Schools will accept letters of recommendation processed through the Central Application Service for Physician Assistants (CASPA): www.caspaonline.org
- 154 PA programs participate in the Central Application Service for Physician Assistants (CASPA), a service of the Physician Assistant Education Association (PAEA). Applications are available in April and accepted June 1.
- Arrange to have official transcripts sent to CASPA.
- Supplemental application material may be requested by individual programs.
- Interviews

Visit the web site of the Physician Assistant Education Association (PAEA) at www.paeaonline.org for information about the CASPA and other helpful information about preparing for and applying to Physician Assistant Programs.

Other helpful sites: American Academy of Physician Assistant (AAPA): www.aapa.org
Required Courses for MOST Physician Assistant Programs:

BIO 1: Biodiversity, Evolution & Ecology
BIO 131: Systemic Physiology
BIO 2: Cells, Molecules & Genes
BIO 139: Microbiology
CHEM 1A: General Chemistry
CHEM 1B: General Chemistry
STAT 1: Introduction to Statistics
ENG 1A: College composition
ENG 20: College Composition
MATH 26A: Calculus I (required by few schools)
PHYS 5A: General Physics I (required by few schools)

Some California schools require a college level Beginning Spanish course

Recommended Electives:
BIO 195: Internships
A course in Medical Terminology (required by some schools)
A course in Organic Chemistry is required by few schools

Recommended General Education Courses (courses in bold are REQUIRED by most schools):

AREA A
A1: COMS 4: Introduction to public speaking
A2: ENG 1A: College Composition
A3: PHIL 4: Critical Thinking

AREA B  Met by science prerequisites

AREA C
C1: ANY
C2: ANY
C3: PHIL 2: Ethics
C4: ANY

AREA D
D1: PSYCH 2: Introduction to Psychology
SOC 1: Introduction to Sociology
D2: ANTH 101: Cultural Diversity (writing intensive course)
ETHN 100: Ethnic America (writing intensive course)
PHIL 101: Ethics & Social Issues (writing intensive course)
PHIL 104: Bioethics
SOC 120: Ethnic and Race Relations
SWRK 151: Health Services and Systems
D3: GOV 1 or GOV 150 &
HIST 17A or 17 B

AREA E
HLSC 124: Consumer Health Education
HLSC 134: Understanding Human Sexuality
NURS 160: Human Sexuality
PHIL 100: Ethics and Personal Values
PSYCH 151: Psychological Aspects of Death/ Dying
PREPARATION FOR PHARMACY SCHOOL (Tentative time-line)

- Choose a major that you are interested in and that fulfills the prerequisites within the major. The most common majors are Chemistry (Biochemistry concentration) and Biology.

- Visit the CSUS pre-health Home Page: [www.csus.edu/prehealth/index.stm](http://www.csus.edu/prehealth/index.stm)

- Complete the **pre-requisite courses** for pharmacy school
  - It is important to check with each school – the suggested required courses on the following page is what MOST pharmacy schools require. **Course requirements vary significantly.**
  - The annual publication of the America Association of Colleges of Pharmacy (AACP), Pharmacy School Admission Requirements (PSAR) lists the specific requirements of all the pharmacy colleges and schools: [www.aacp.org/resources/student/pharmacyforyou/admissions/pages/PSAR.aspx](http://www.aacp.org/resources/student/pharmacyforyou/admissions/pages/PSAR.aspx).
  - (A copy is available in the NSAC office, SQU 238).
  - The Pharmacy College Application Service (PharmCAS) also has very useful information regarding the various Pharmacy Schools’ requirements: [www.pharmCAS.org/](http://www.pharmCAS.org/)

- If possible, sign up for **extracurricular activities** such as internships, volunteer work, job shadowing and research opportunities.
  - Join campus clubs and organizations such as the CSUS Future Pharmacist Student Organization
  - Visit their current website and Facebook page: [www.csus.edu/org/fpso](http://www.csus.edu/org/fpso) and [www.facebook.com/sac.fpso](http://www.facebook.com/sac.fpso)

- Begin working on your **personal statement**

- Study for and take the Pharmacy Technician Certified Board (PTCB) test and becoming PTCB certified, as well as state certified, can improve your chances of finding jobs, volunteering, and shadowing opportunities in pharmacies.

- Join campus clubs and organizations such as the CSUS Future Pharmacist Student Organization
  - Visit their current website and Facebook page: [www.csus.edu/org/fpso](http://www.csus.edu/org/fpso) and [www.facebook.com/sac.fpso](http://www.facebook.com/sac.fpso)

- Research and select the schools you wish to apply to.
  - Select faculty members that will write you strong **letters of recommendation**
    - A letter of recommendation from a pharmacist is usually required.
    - Evaluators may choose to submit their letter electronically (eLOR) or submit paper references to schools that participate in PharmCAS ([www.pharmCAS.org/](http://www.pharmCAS.org/)). Some schools require that the letters are sent directly to them in addition to PharmCAS.
    - Check with your schools to see if they prefer or allow a “Committee Letter”.

- The Pharmacy College Application Service (PharmCAS) is a centralized application service used by 3/4 of the pharmacy schools in the United States. PharmCAS applications are available early June, and the application deadlines range from November to March depending on the schools. Have a copy of your unofficial transcripts with you while completing the application. It is long and tedious.
  - Check the PSAR guide and PharmCAS website to see which schools participate in PharmCAS and do not.
  - Arrange to have official transcripts sent to PharmCAS
  - Some schools require **supplemental applications** with additional essays to complete.
  - Prepare for and attend your in-person **Interviews** that all pharmacy schools require before acceptance.

Visit the web site of the America Association of Colleges of Pharmacy at: [www.aacp.org](http://www.aacp.org) for information about the PCAT and the PharmCAS, along with other helpful information about preparing for and applying to pharmacy school.

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**Required Courses for most Pharmacy Schools:**

- **BIO 1**: Biodiversity, Evolution & Ecology
- **BIO 2**: Cells, Molecules & Genes
- **CHEM 1A**: General Chemistry
- **CHEM 1B**: General Chemistry
- **CHEM 24**: Organic Chemistry I
- **BIO 22**: Human Anatomy
- **BIO 131**: Systemic Physiology
- **BIO 139**: General Microbiology
- **BIO 121**: Molecular Cell Biology
CHEM 124: Organic Chemistry II
CHEM 25: Organic Chemistry Lab
CHEM 161: Biochemistry (some schools require CHEM 160A and CHEM 160B instead)
PHYS 5A*: General Physics I (some schools require a second semester of physics – PHYS 5B)
MATH 26A*: Calculus I (some schools require a second semester of calculus MATH 26B)
STAT 1: Introduction to Statistics
ENG 1A: College Composition
ENG 20: College Composition

*Schools will typically accept the higher-level or more difficult series of a class, such as calculus-based physics or calculus with trig

**Recommended Upper Division Electives:**

BIO 195: Internships (if possible)

**Recommended General Education Courses (courses in bold are REQUIRED by most schools):**

**AREA A**

A1: **COMS 4**: Introduction to Public Speaking
A2: **ENG 1A**: College Composition
A3: **PHIL 4**: Critical Thinking

**AREA B** Met by science prerequisites

**AREA C**

C1: ANY
C2: ANY
C3: **PHIL 2**: Ethics
C4: ANY

**AREA D**

D1: **PSYCH 2**: Introduction to Psychology
SOC 1: Introduction to Sociology
**ECON 1A**: Introduction to Macroeconomic Analysis (some schools require ECON 1B)
D2: ANTH 101: Cultural Diversity (writing intensive course)
ETHN 100: Ethnic America (writing intensive course)
PHIL 101: Ethics & Social Issues (writing intensive course)
PHIL 104: Bioethics
SOC 120: Ethnic & Race Relations
SWRK 151: Health Services and Systems
D3: GOV 1 or GOV 150 &
HIST 17A or 17 B

**AREA E**

HLSC 124: Consumer Health Education
HLSC 134: Understanding Human Sexuality
NURS 160: Human Sexuality
PHIL 100: Ethics and Personal Values
PSYCH 151: Psychological Aspects of Death/ Dying

Any other rigorous courses applied to Pharmacy, Drugs, Healthcare, Physiology, or Chemistry may help in admissions and provide good background knowledge for graduate school.