

# Typical Dental School Prerequisite Requirements

Subject	# of Semesters	Simmons Courses to Satisfy Prerequisites
Biology	3+ semesters	*BIOL 113: General Biology (SCI) *BIOL 225: Cell Biology (SCI) At least one additional course at 200+ level: One that covers structure and function of systems prior to the DAT: BIOL 222: Animal Physiology or BIOL 231 & 232: Anatomy and Physiology I & II
General Chemistry (C- grade requirement for all CHEM prereqs.)	2 semesters	*CHEM 113: General Chemistry I or *CHEM 115: Intensive General Chemistry  *CHEM 216: General Chemistry II & Quantitative Analysis
Organic Chemistry	2 semesters	*CHEM 224: Organic Chemistry I (SCI) *CHEM 225: Organic Chemistry II (SCI)
Mathematics	3 semesters	MATH 120: Calculus I (QL, prerequisite for PHYS 114) MATH 121: Calculus II (QL, prerequisite for PHYS 115) STAT 118: Introductory Statistics and/or higher level (QL)
Biochemistry	1 semester	CHEM 345: Biochemistry (recommended) or CHEM 223: Introduction to Biochemistry (SCI)
Physics	2 semesters	PHYS 114: Fundamentals of Physics I (IL) PHYS 115: Fundamentals of Physics II (SCI)
English Composition (WRI 101 fulfills 1 semester)	2 semesters	<b>ENGL</b> : choose a writing intensive course (Can be fulfilled through ALA or Writing Intensive)
Studio Art Many dental schools require at least one studio arts course where students work with their hands (e.g. Ceramics, Sculpture, Jewelry Making).	1 semester	See catalog for course listings. Suggestions include:  ART 119: Sculpture (ALA)  It is often acceptable to take this course at a community college. It is strongly recommended to consult with the Simmons Art Department before cross-registering at MassArt as these courses are typically very intense.
Social Sciences (strongly recommended)	2 semesters	PSYC 101: Introduction to Psychological Science (or higher) SOCI 101: Introduction to Sociology OR a healthcare sociology course (options include SOCI 241, SOCI 245, SOCI 345, or similar courses) (often fulfills GH or DEIJ)

<sup>\*</sup>Should be taken before the DAT

**Note**: Additional upper-level science classes are always beneficial, especially if students choose a major outside the sciences, be sure to refer to Dental School websites for school-specific requirement





Simmons supports three timeline options for Pre-Dental students: the "Traditional" Timeline, the Growth(+) Year Timeline, and the Grow Into Chemistry Timeline. All three equally prepare students for dental school.

**NOTE**: These timelines do not include major requirements or all PLAN requirements. They are only samples of the Pre-Dental course sequence with notes about the Simmons PLAN.

#### "Traditional" Timeline Example

This timeline is an <u>example</u> of how you <u>may</u> wish to take courses if you plan to go directly from Simmons to Dental School. This is generally an appropriate route for a student who has no doubts that they want to attend dental school (and therefore don't need to spend time exploring options), and is strong academically in their first two years of college. It is common for students to start out on the "Traditional" Timeline in their first year, and then transition to the Growth Year Timeline later in their career for a variety of reasons (i.e. academic rigor, DAT preparation timeline, wanting to work before starting dental school, etc.). Students will consult with the Pre-Health Advisors to determine which timeline will aid them in being the strongest possible candidate at the time of application to dental school. This timeline is designed to prepare you to take the DAT in the spring semester of your **junior** year.

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Year & PLAN Notes	Fall	Spring	Summer		
Year 1 WRI 101: Writing Boston	SIM 100: Simmons (2 cr.)  CHEM 113: Inorganic Chemistry I  BIOL 113: General Biology	CHEM 216: General Chemistry II & Quantitative Analysis  MATH 120: Calculus I	Exposure to Dentistry Community Service		
Year 2	CHEM 224: Organic Chemistry I  MATH 121: Calculus II	CHEM 225: Organic Chemistry II BIOL 225: Cell Biology	Continue Service Research		
Year 3 Simmons 200: Extend, 2 cr.	PHYS 114: Physics I  BIOL 222: Animal Physiology (or BIOL 231 Fall, BIOL 232 Spring)  DAT Preparation & Review Committee Process	PHYS 115: Physics II  DAT Preparation  Take DAT Exam by Mid-April  Committee Letter Process	Research or Clinical Experience Apply by June/July		
Year 4 Capstone (in major)	CHEM 345: Biochemistry  Dental School Interviews	Dental School Interviews	Take a break before Dental School		
Additional Required & Strongly Recommended Coursework:  These courses are offered in both Fall and Spring semesters, and therefore offer students greater flexibility when adding them to their academic plan.	STAT 118: Introductory Statistics (or higher, QL) PSYC 101: Introduction to Psychological Science (or higher) *1 Sociology Course: Intro to Sociology or a healthcare sociology course (options include SOCI 101, SOCI 241, SOCI 245, SOCI 345, or similar courses) (often GH or DEIJ) ENGL: choose a writing intensive course (Can be fulfilled through ALA or Writing Intensive) Studio Art Course: Many dental schools require at least one studio arts course where students work with their hands (e.g. Ceramics, Sculpture, Jewelry Making) (ALA) Some Key Content Areas (ALA, GH, and SCI) and Key Skills Areas (DEIJ, QL, IL, WI, and Leadership) requirements may be fulfilled with the above Pre-Health courses.				





#### **Growth Year (+) Timeline Example**

This timeline is an <u>example</u> of how you <u>may</u> wish to take courses If you plan to take at least one growth year between Simmons and medical school. Approximately 80% of Simmons Pre-Health students and 50% of students nationally take at least one growth year.

This schedule is designed to prepare you to take the DAT in the spring semester of your **senior** year. The exam should be taken in the calendar year prior to which you plan to enter dental school (for example, if you are applying in 2022 for entrance to medical school in Fall 2023, you should take the exam in Spring 2022). If you wish to take additional years before applying to dental school, the DAT, committee letter process, and application timeline can be moved to later years (although the times of year will always remain the same). Pre-Health Advising is available to Alumni to support then during their growth years

Year & PLAN Notes	Fall	Spring	Summer	
Year 1 WRI 101: Writing Boston	SIM 100: Simmons (2 cr.)  CHEM 113/115: Inorganic Chemistry I  BIOL 113: General Biology	CHEM 216: General Chemistry II & Quantitative Analysis  MATH 120: Calculus I	Exposure to Dentistry Community Service	
Year 2	CHEM 224: Organic Chemistry I  MATH 121: Calculus II	CHEM 225: Organic Chemistry II BIOL 225: Cell Biology	Continue Service Research	
Year 3 Simmons 200: Extend, 2 cr.	PHYS 114: Physics I  BIOL 222: Animal Physiology (or BIOL 231 Fall, BIOL 232 Spring)	PHYS 115: Physics II	Continue Service Research	
<b>Year 4</b> Capstone (in major)	CHEM 345: Biochemistry  DAT Preparation & Review Committee  Process	DAT Preparation  Take DAT Exam by Mid-April  Committee Letter Process	Research or Clinical Experience Apply by June/July	
Growth Year	Dental School Interviews	Dental School Interviews	Take a break before Dental School	
Additional Required & Strongly Recommended Coursework:  These courses are offered in both Fall and Spring semesters, and therefore offer students greater flexibility when adding them to their academic plan.	STAT 118: Introductory Statistics (or higher, QL) PSYC 101: Introduction to Psychological Science (or higher) *1 Sociology Course: Intro to Sociology or a healthcare sociology course (options include SOCI 101, SOCI 241, SOCI 245, SOCI 345, or similar courses) (often GH or DEIJ) ENGL: choose a writing intensive course (Can be fulfilled through ALA or Writing Intensive) Studio Art Course: Many dental schools require at least one studio arts course where students work with their hands (e.g. Ceramics, Sculpture, Jewelry Making) (ALA)  Some Key Content Areas (ALA, GH, and SCI) and Key Skills Areas (DEIJ, QL, IL, WI, and Leadership) requirements may be fulfilled with the above Pre-Health courses.			





## **Grow into Chemistry Timeline Example**

This timeline allows students to ease into the rigorous Chemistry sequence required for dental school. It allows time to adjust to a college curriculum and take a health science-focused survey of Chemistry course prior to starting the Pre-Dental Chemistry sequence with CHEM 113: General Chemistry I in the sophomore year. Please note that this timeline will require at least one growth year between graduation from Simmons and starting dental school. Approximately 80% of Simmons Pre-Health students and 50% of students nationally take at least one growth year.

This schedule is designed to prepare you to take the DAT in the spring semester of your **senior** year. The exam should be taken in the calendar year prior to which you plan to enter dental school (for example, if you are applying in 2022 for entrance to dental school in Fall 2023, you should take the exam in Spring 2022). If you wish to take additional years before applying to dental school, the DAT, committee letter process, and application timeline can be moved to later years (although the times of year will always remain the same). Pre-Health Advising is available to Alumni to support them during their growth years.

Year & PLAN Notes	Fall	Spring	Summer	
Year 1 WRI 101: Writing Boston	SIM 100: Simmons (2 cr.) BIOL 113: General Biology	CHEM 110: General, Organic, and Biological Chemistry  MATH 120: Calculus I	Exposure to Dentistry Community Service	
Year 2	CHEM 113: General Chemistry I  MATH 121: Calculus II	CHEM 216: General Chemistry II & Quantitative Analysis BIOL 225: Cell Biology	Continue Service Research	
Year 3 Simmons 200: Extend, 2 cr.	CHEM 224: Organic Chemistry I  PHYS 114: Physics I  BIOL 222: Animal Physiology (or BIOL 231 Fall, BIOL 232 Spring)  DAT Preparation & Review Committee Process	CHEM 225: Organic Chemistry II  PHYS 115: Physics II  DAT Preparation  Take DAT Exam by Mid-April  Committee Letter Process	Research or Clinical Experience Apply by June/July	
Year 4 Capstone (in major)	CHEM 345: Biochemistry  Dental School Interviews	Dental School Interviews	Take a break before Dental School	
Additional Required & Strongly Recommended Coursework:  These courses are offered in both Fall and Spring semesters, and therefore offer students greater flexibility when adding them to their academic plan.	STAT 118: Introductory Statistics (or higher, QL) PSYC 101: Introduction to Psychological Science (or higher) *1 Sociology Course: Intro to Sociology or a healthcare sociology course (options include SOCI 101, SOCI 241, SOCI 245, SOCI 345, or similar courses) (often GH or DEIJ) ENGL: choose a writing intensive course (often ALA) Studio Art Course: Many dental schools require at least one studio arts course where students work with their hands (e.g. Ceramics, Sculpture, Jewelry Making) (ALA)  Some Key Content Areas (ALA, GH, and SCI) and Key Skills Areas (DEIJ, QL, IL, WI, and Leadership) requirements may be fulfilled with the above Pre-Health courses.			



# Pre-Dental Academic Planning Worksheet Undergraduate Advising 2024-2025

### Applying to Dental School

Admission to dental school is competitive. Nationally, the percentage of applicants who are accepted varies from year to year but is generally approximately 50% of the applicant pool. Accepted applicants nationally have an overall undergraduate grade point average of 3.4-3.5. Accepted applicants also score an average of 20 on the DAT.

#### **Qualities of Strong Professional School Applicants:**

- Apply early (early summer) of the year before the expected year of matriculation.
- Submit applications to schools that best match your strengths.
- A high GPA in science and non-science courses a competitive GPA is above a 3.5
- High Scores on the DAT
- Active in volunteer/work experience/extracurricular events
- Has significant clinical experience shadowing & volunteer work are essential!
- Well known by professors
- Great letters of recommendation and evaluations
- It is recommended that applicants complete prerequisite courses at their home institution. If this is not possible, they should be completed at an accredited 4-year institution.

Students applying to dental schools must submit application materials through AADSAS.

• AADSAS Resources: <a href="https://www.adea.org/GoDental/The-application-to-dental-school-ADEA-AADSAS.aspx">https://www.adea.org/GoDental/The-application-to-dental-school-ADEA-AADSAS.aspx</a>

#### **GPA Calculation**

- Most professional schools will calculate your Overall GPA as well as your Science & Math GPA for admission.
   Math/science GPA is calculated using scores from any course taken in the departments of Biology, Chemistry, Physics, and Math (BCPM GPA).
- AP credits are NOT computed into your GPA
- ALL post-secondary coursework will be used to compute your GPA for admission, even if they are not included in your Simmons GPA. Dual-enrollment and transfer courses DO count toward your GPA for admission.
- "W" grades do not count in your GPA. However, avoid "W" grades. Professional schools expect students to consistently carry a full-time course load (16-18 credits).

#### Researching Dental Schools

Admission requirements vary by program and institution. It is strongly recommended that students begin researching school-specific requirements early to ensure they are completing all required prerequisites. To find school-specific requirements, visit their websites or the American Dental Association (ADA) website: <a href="https://www.ada.org/en/education-careers/dental-schools-and-programs">https://www.ada.org/en/education-careers/dental-schools-and-programs</a>

#### **Dental Admission Test**

In general, most U.S. dental schools will expect applicants to take the Dental Admission Test (DAT). Up to date information regarding the current DAT is available at <a href="http://www.ada.org/en/education-careers/dental-admission-test">http://www.ada.org/en/education-careers/dental-admission-test</a>. The DAT is a 5 hour (with breaks) computer-based, multiple choice exam administered through Prometric Test Centers in the U.S. and its territories. Testing appointments are available year-round. Individuals must wait 90 days between testing attempts. Examinees who have tested three or more times must apply for permission to take the test again. Some students find that it is helpful to take a preparation course for the DAT. Currently it costs \$460 per attempt of the DAT.

#### **Sections of the DAT:**

- Natural sciences (biology, general chemistry, and organic chemistry)
- Perceptual ability (two- and three-dimensional problem solving)
- Reading comprehension (dental and basic sciences)
- Quantitative reasoning (mathematical problems in algebra, numerical calculations, conversions, etc.)