

## Academic Preparation for Dental School

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**Minimum Required Coursework for Dental School.** Most dental schools in the U.S. require a minimum of one year of general chemistry (CHM 111 and 112), one year of organic chemistry (CHM 221 and 222), one year of general biology (BIO 171 and 172), and one year of physics (PHY 141 and 142 or 161 and 162), all with lab components. Most schools also now require one semester of biochemistry (BMB 465), but the requirements for the lab vary. Some require up to a year of college-level mathematics; others require public speaking (COM 210), specific humanities courses, human anatomy and physiology, and/ or additional upper division biology courses like microbiology (BIO 303). Because the admission requirements for the different dental schools in the U.S. vary, students on the pre-dental track must investigate the different dental schools available and make themselves aware of the particular requirements for the programs in which they are interested. Students should consult the ADEA's *Dental School Explorer* (<https://dentalschoolexplorer.adea.org/>), and the document, *Investigating Dental Schools*, on the Pre-dental Track Page.

**Manual Dexterity.** Because manual dexterity and three-dimensional reasoning skills are expected of dental students, pre-dental students are encouraged to take coursework that will help develop those skills. For instance, pre-dental students enrolled in the College of Liberal Arts & Sciences who are on the Integrative Studies general education track are encouraged to fulfill the Creative Expression block by taking a class such as Drawing (ART 115), Ceramics (ART 223), Sculpture (ART 224) Painting (ART 225) or Printmaking (ART 226). (Also see the document, *Developing Manual Dexterity*, on the Pre-dental Track Page.)

**AP, IB, and CLEP Credit to Fulfill Science Prerequisites.** There may be dental schools that do not accept AP, IB, or CLEP credit to fulfill the lab science prerequisites. Students should investigate the policies of their favorite dental schools before deciding whether to keep any AP credit for basic sciences they have been awarded or to accept credit for a lower level class instead and take college class.

**Online Science Coursework.** Until the COVID-19 pandemic, most medical and dental schools did not accept online coursework for the core science requirements. This requirement was temporarily relaxed for students at institutions that did not offer students a choice due to the pandemic, but most medical and dental schools have returned to the "in person" requirement.

**Pass/ Fail Grading Options.** Until the COVID-19 pandemic, most medical and dental schools did not accept prerequisite coursework graded on a pass/ fail basis. This requirement was temporarily relaxed for students at institutions that did not offer students a choice due to the pandemic, but most schools have returned to the policy of accepting only prerequisite courses taken for a letter grade.

**Majors and Minors for Pre-Dental Students.** Most dental schools in the U.S. prefer applicants who complete a bachelor's degree before they matriculate, but many do not express a preference for any particular academic major when reviewing applications. Pre-dental students should be aware that most dental schools prefer to see students majoring in a field in which they are truly interested in rather than majoring in a field just to "look good".

Although a pre-dental student may major in any discipline s/he chooses, s/he must also complete the required courses for admission to their preferred dental programs. Before officially declaring a major, therefore, a student should create a personalized 4-year plan (4YP) that includes all required coursework to see how well the two programs fit together. (Watch the video, *Creating a 4-Year Plan*, in the GPS advising course on Canvas.) Students need to be aware that extra semesters might be required for degree programs that do not fit well with the pre-dental classes.

**Minors in Chemistry & Biology.** Pre-dental students who select a non-science major are encouraged to at least minor in both Chemistry and Biology in order to obtain a firm foundation in the sciences.

Chemistry Minor: Students who complete 16 credit hours of chemistry (CHM 111, 112, 221, and 222 or CHM 115, 241, 221, and 222) , with 6 hr or more in courses numbered 200 or higher taken in residence at Mercer, fulfill the Mercer University College of Liberal Arts & Sciences requirements for a minor in chemistry.

Biology Minor: UNDER REVIEW.

**Dental School Matriculation Without a Degree.** Students are often surprised to learn that many dental schools do not require a bachelor's degree for admission; such schools usually require completion of a minimum of 60-90 credit hours of pre-dental coursework instead. Students interested in this option must plan ahead carefully, as they would need to take the DAT and apply to dental school at the end of their second year of undergraduate study (see the document, *Preparing for the DAT*, on the Pre-dental Track Page) rather than at the end of their third year. Students should realize that it is unusual for a student to be able to build a strong enough application portfolio to compete for admission in this short time frame, and are encouraged to have a back-up plan in place for completing a bachelor's degree and applying again.

