

University of Southern Mississippi
College of Science and Technology
Pre-Dental Curriculum Rev. 8/18/2009

The “pre-dental curriculum” is just *a list of courses that are required for admission to dental school*. **It is NOT an academic major, a minor, nor an emphasis area.**

Dental schools have relatively similar minimal requirements for admission, typically:

- **completion of a series of specified courses** in Biology, Chemistry, Physics, Mathematics; English composition
 - laboratory science courses intended for non-majors are not accepted by dental schools
- completion of a **baccalaureate degree**; consideration is given to exceptional students with 90 credit hours but a degree is preferred
- competitive scores from the nationally administered Dental Admission Test (**DAT**)

Dental schools **do not require a particular major**. Although most pre-dental students major in one of the sciences, other majors are acceptable. Students should choose the major in which they feel the most comfortable.

The following list of **Required Courses** meets only the *minimal requirements for admission* to the School of Dentistry of the University of Mississippi Medical Center in Jackson.

Link to SoD UMMC admissions: <http://dentistry.umc.edu/students/prospective/>

Students must consult the specific admission requirements and application deadlines for the school(s) to which they plan to apply, including UMMC.

- two semesters each of core science courses with laboratories (biological science, inorganic chemistry, organic chemistry, physics)
- two semesters each of mathematics, English composition, advanced biology or chemistry
- one semester of statistics

Progress toward a Baccalaureate Degree

Course work toward a baccalaureate degree at Southern Miss must be planned so the student meets all the requirements for the preprofessional curriculum, a major, a minor if appropriate, the University General Education Curriculum, and the College core. At Southern Miss, a minimum of 124 hours is needed for most baccalaureate degrees, with 45 of these hours from courses at the 300-level or above.

The **suggested course sequence** below is merely a guideline. Students must consult the USM Undergraduate Bulletin, the USM Class Schedule Guide for each semester, and their academic advisor. During the last semester of the Sophomore year, students should develop a more detailed plan for the Junior and Senior years because many upper level courses are offered in specific semesters (Fall or Spring only) and/or on a rotating two-year cycle.

YEAR 1

Fall

BSC 110&L **OR** BSC 111&L 4 h
CHE 106&L^a 4 h
MAT 101^b 3 h
ENG 101 3 h
One other course^c 3 h

Spring

BSC 111&L **OR** BSC 110&L 4 h
CHE 107&L 4 h
MAT 103^b 3 h
ENG 102 3 h
One other course^c 3 h

^a, CHE 100 is required when the chemistry background is not adequate. Students may enter CHE 100 directly, if they choose. Students enrolled in CHE 106/L must take a standardized test during the first week or two of class in order to remain in CHE 106/L; if they do not meet the minimum score, these students move to a CHE 100 class.

^b, Calculus is required for most majors in the College of Science and Technology. Placement in MAT courses depends on the student's ACT subscore. Students may enroll in Calculus directly if the ACT mathematics *subtest score is greater than or equal to 26*; otherwise, they must take prerequisite courses, typically College Algebra (MAT 101) and/or Trigonometry (MAT 103). Entering freshmen with an ACT mathematics *subtest score less than or equal to 19* must take Intermediate Algebra (MAT 099) during the first semester. Students may take Trigonometry if the ACT mathematics *subtest score is equal to or greater than 24* or if they have a grade of C or better in College Algebra. Students entering Calculus (MAT 167 or MAT 314) directly can use this course to satisfy the UMMC math requirement but must take an additional approved math elective course.

^c, "Other" courses include those in the General Education Curriculum and in the major and/or minor as well as "recommended courses" and "approved electives."

Strategy for Success

- Students should focus on doing well in their academic studies.
- Students should become involved with extracurricular activities, including meaningful **community service learning** and **volunteer activities** that will demonstrate effective interactions with diverse people and effective time management skills. Students should maintain a record of the dates and total hours spent performing such activities. This will be needed when it comes time to apply to dental school.
- Students should start getting some **hands-on exposure** to dentistry.

Students are strongly encouraged to complete the pre-requisites for the **Predental Externship** during the first year. A Preprofessional Externship course is offered each Fall semester. Students may participate in the externship twice. Since students typically apply to dental school at the end of the Junior year, participation in the externship as Sophomores and Juniors is recommended.

Externship prerequisites are ENG 101, 102; BSC 110/L, 111/L; CHE 106/L, 107/L; (MAT 101, 103) **OR** (MAT 167 or MAT 314 **and** one upper level BSC or CHE course).

YEAR 2

Fall		Spring	
CHE 255&L	4 h	CHE 256&L	5 h
PHY 111&L	4 h	PHY 112&L	4 h
[or PHY 201&L	5 h]	[or PHY 202&L	5 h]
2-3 other classes ^d	6-9 h	Statistics (PSY 360, MAT 320)	3 h
		1-2 other classes	3-6 h

^d, Students are strongly encouraged to complete the requirements for the **Predental Externship** during the first year, so they are able to take the **Preprofessional Externship Course** in the Fall semester of the second year. Prerequisites are ENG 101, 102; BSC 110/L, 111/L; CHE 106/L, 107/L; (MAT 101, 103) **OR** (MAT 167 or MAT 314 **and** one upper level BSC or CHE course).

Strategy for Success

- Students continue to focus on doing well in their studies.
- Students must remain involved with **community service learning** and **volunteer activities**.
- Students continue to participate in **hands-on exposure** to dentistry.
Students are strongly encouraged to participate in the **Preprofessional Externship Course**, which is offered each Fall. Students may participate in the externship twice. Since students typically apply to dental school at the end of the Junior year, participation in the externship as Sophomores and Juniors is recommended.
- Students typically join **AED**, the national Health Preprofessional Honor Society, in the Spring semester. Applications are available in TEC 103 and online.

YEAR 3

Fall

Advanced science elective^f

3-4 h

Other courses^{f,g}

12-15 h

Spring^e

Advanced science elective^f

3-4 h

Other courses^{f,g}

12-15 h

^e, Students may take BSC 399 (MCAT Preparation) before attempting the DAT for the first time; however, not everything covered in the DAT is discussed in BSC 399. BSC 399 is taught in the Spring semester.

^f, Recommended advanced science electives include Cellular Biology (BSC 360), Comparative Anatomy (BSC 361), Genetics (BSC 370/L), Microbiology (BSC 380/L), Physiology (BSC 451, BSC 450), Immunology (BSC 486), CHE 420 (Survey of Biochemistry), CHE 421 (Biochemistry I), CHE 422 (Biochemistry II), and others.

^g, Although not required, the following courses are **highly recommended**: Comparative Anatomy (BSC 361); Biochemistry (CHE 421, CHE 422); biostatistics; Speech (SCM 111); humanities core courses (ENG 203, HIS 101, HIS 102); quantitative analysis; Physical Chemistry (CHE 461/L, CHE 462/L); embryology; histology; Immunology (BSC 486/L); Microbiology (BSC 380/L); bacteriology; Cellular Biology (BSC 360); cell physiology; and psychology.

Recommended *elective courses* include:

sociology, philosophy, history, computer science, economics, literature, and advanced English, foreign language, fine arts, business, accounting, and selected advanced courses in mathematics, chemistry, physics, and biology.

The **application process may begin** during the third year. Students should learn about the DAT, the AADSAS (Associated American Dental Schools Application Service) application process, and getting letters of evaluation.

AADSAS: http://www.adea.org/DENTAL_EDUCATION_PATHWAYS/AADSAS/Pages/default.aspx

UMMC applicants must show credit for at least 90 semester hours of acceptable courses. *Strong preference is given to students who will have completed all requirements for a baccalaureate degree prior to entering the School of Dentistry.*

- *Fall and Spring*: begin DAT preparation (review content, take practice tests online)
- *Spring*: take first DAT
- *Spring*: request official transcripts and letters of evaluation from faculty; work on personal statement
- *July 1*: earliest receipt date for complete AADSAS application (recommended)
- *Summer*: repeat DAT, if needed

Strategy for Success

- Students continue to focus on doing well in their studies.
- Students remain involved with meaningful **community service learning** and **volunteer activities**.
- Students continue to participate in **hands-on exposure** to dentistry.
Students are strongly encouraged to participate in the **Preprofessional Externship Course**, which is offered each Fall. Students may participate in the externship twice. Since students typically apply to dental school at the end of the Junior year, participation in the externship as Sophomores and Juniors is recommended.
- Students may sign up for mock interviews, to be conducted at the USM Speaking Center or at Career Services.

YEAR 4

Fall

Classes to fulfill major, minor 15-18 h

Spring

Classes to fulfill major, minor 15-18 h

The **application process must begin** this year, if not done previously.

- Students may sign up for mock interviews, to be conducted at the USM Speaking Center or at Career Services.

For more information about a career in Dentistry, you may contact:

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