The University of Southern Mississippi

COLLEGE OF SCIENCE AND TECHNOLOGY | HEALTHCARE PREPROFESSIONAL OFFICE

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PRE CYTOTECHNOLOGY CURRICULUM 11/2014

THE MAJOR

The “pre-cytotechnology curriculum” is just a list of courses that are required for admission to a professional program. It is NOT an academic major, a minor, or an emphasis area.

Even if you plan to apply to a cytotechnology program after taking only the courses required for admission (minimum of 90 hours for the program at the University of Mississippi Medical Center), you need to declare an academic major at USM.

Many students choose a major in one of the sciences (Biological Sciences, Chemistry/Biochemistry, Physics) but other majors are acceptable including those in the humanities, social sciences, or business. Students should select the major in which they feel the most comfortable and in which they would like to pursue a baccalaureate degree or in which they would like to work if they are not accepted into a cytotechnology program.

University of Southern Mississippi (USM) students wishing to pursue Cytotechnology in Mississippi apply to the Bachelor of Science in Cytotechnology program at University of Mississippi Medical Center (UMMC) in Jackson either in their third year of their USM pre-cytotechnology curriculum or after completion of a baccalaureate degree. If accepted into the one year UMMC Cytotechnology program they begin the program in the summer.

Visit the American Society for Cytotechnology (ASC) web pages for more information about cytotechnology programs.
Link to main page: http://www.asct.com/content/about-asct
Link to Profession of Cytotechnology: http://www.asct.com/content/profession-cytotechnology

REQUIREMENTS FOR APPLICANTS

The following three-year Recommended Course Sequence meets only the minimal requirements for admission to the one-year professional Cytotechnology program that was initiated in 2012 within the School of Health Related Professions at the University of Mississippi Medical Center in Jackson. This one year program is the student’s senior year as an undergraduate and begins approximately June 1 each year and requires the summer semester, a fall semester, and then the subsequent spring semester to finish.
Link to UMMC SHRP: http://www.umc.edu/shrp/
Link to Cytotechnology program: http://www.umc.edu/Education/Schools/Health_Related_Professions/Cytotechnology/Cytotechnology_Home.aspx

Preference is given to applicants who are legal residents of Mississippi. Out-of-state applicants will be considered only if there are positions available after all qualified Mississippi applicants are accepted.
Following satisfactory completion of all requirements for this professional program, all students will be awarded the Bachelor of Science in Cytotechnology from the University of Mississippi Medical Center and are eligible to take the certification examination in cytotechnology.

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

Prerequisite Courses to be completed at the University of Southern Mississippi (or other college/university) before entering UMMC’s Cytotechnology program.

- English composition (2 courses, 6 hours)
- College Algebra, Quantitative Reasoning, or higher mathematics (1 course, 3 hours)
- Social or Behavioral Sciences (2 courses, 6 hours)
- Humanities and Fine Arts (3 courses, 9 hours)
- Natural Sciences with labs (7 courses, 28 hours)

Any combination of biology and chemistry courses, for example general biology, anatomy and physiology, genetics, histology, microbiology, general zoology; general chemistry, organic chemistry, biochemistry, and physics

Science survey courses and science courses designed for non-science majors are not accepted.

- Electives (38 hours)

SUGGESTED COURSE SEQUENCE & STRATEGIES FOR SUCCESS

The suggested course sequence below is merely a guideline to complete the courses required for the UMMC Cytotechnology program in a timely manner. Courses to fulfill the major must be worked into the student’s schedule.

Students must consult the USM Undergraduate Bulletin, the USM Class Schedule Guide for each semester, and their academic advisor. Many courses are offered in specific semesters (Fall or Spring only) and/or on a rotating cycle.

YEAR 1

Fall | Spring
--- | ---
Natural science & lab $^a$ | Natural science & lab $^{a,b}$
MAT 101 OR MAT 100 $^c$ | ENG 102
ENG 101 $^d$ | 3 required/elective courses $^{e,f}$
2 required/elective courses $^{e,f}$ | 9-11 h

$^a$, Natural science courses (must include the lab, if one is offered) include general biology (BSC 110/L, 111/L), anatomy and physiology (BSC 250/L, 251/L), genetics [BSC 370; one semester of organic chemistry (CHE 255/L) is recommended as prerequisite for genetics], histology (BSC 461/L), cell biology (BSC 360), microbiology (BSC 380/L), zoology (BSC 201/L); general chemistry (CHE 106/L, 107/L), organic chemistry (CHE 255/L, 256/L), biochemistry (CHE 420 or 421,422, 424), physics (PHY 111/L and 112/L)

Students typically choose Biological Sciences (BSC) for several of the required natural sciences courses, but the order in which students take the introductory BSC 110 and 111 courses does not matter. BSC 110/L covers molecular and cellular topics whereas BSC 111/L covers ecology and organisms. BSC 110/L and BSC 111/L are prerequisites for most other BSC courses. Similarly, students may take BSC 250/L and 251/L in any order. It is recommended that students take BSC 110/L before taking BSC 250/L or 251/L. General Chemistry (CHE 106/L and CHE 107/L) is a requirement for several upper level BSC courses, including Cell Biology, Microbiology and Genetics. Courses in Botany are not acceptable for pre-cytotechnology students.

$^b$, Students enrolling in CHE 106&L must have passed high school chemistry or passed CHE 100 at USM. CHE 100 is required when the chemistry background is not adequate. Students may enter CHE 100 directly, if they choose, but it will not count toward the Cytotechnology prerequisites. Students enrolled in CHE 106/L will take a test about two weeks into the class to determine if they should remain in CHE
106/L. If they do not meet the minimum score, these students are strongly recommended to move to a CHE 100 class, which is offered at the same time as CHE 106.

c, Placement in mathematics (MAT) courses depends on the student’s ACT mathematics subtest score. Calculus is required for most majors in the College of Science and Technology (CoST), but is not required for the cytotechnology program or for majors outside of CoST.

- ACT mathematics subtest score 19 or below: must take MAT 99 (Intermediate Algebra)
- ACT mathematics subtest score 20 or above: MAT 101 (College Algebra)
- ACT mathematics subtest score 24 or above (or grade of C or better in College Algebra): MAT 103 (Trigonometry).
- ACT mathematics subtest score 24 or above (or grade of C or better in Trigonometry): MAT 114 (Calculus for the Arts and Sciences)
- ACT mathematics subtest score 26 or above: MAT 167 (Calculus I)

Students directly entering Trigonometry (MAT 103) or Calculus (MAT 114 or MAT 167) can use this course to satisfy the UMMC math requirement.

d, Placement in English Composition courses depends on the student’s ACT English subtest score.

- ACT English subtest score 16 or below: ENG 99E (Expanded Composition Studio) and ENG 100E (Composition I Expanded)
- ACT English subtest score 17-19: ENG 100E (Composition I Expanded)
- ACT English subtest score 20 or above: ENG 101 (Composition 1)

e, For students pursuing a baccalaureate degree, “required courses” also include those in the General Education Curriculum and in the major and/or minor, as well as those required for the cytotechnology program (2 social and behavioral sciences courses and 3 humanities/fine arts courses).

NOTE: if a student is also pursuing a baccalaureate degree from the University of Southern Mississippi, he/she must take

- one fine arts course (select from ART 130, DAN 130, MUS 165, THE 100)
- two (2) Humanities courses (select from HIS 101, HIS 102, PHI 151, REL 131); one Humanities must be a HIS course
- two (2) Social and Behavioral Sciences courses: select one from (ANT 101, GHY 101, SOC 101) and one from (ECO 101, PS 101, PSY 110). SOC 101 and PSY 110 are commonly selected.

f, Elective courses may include those needed for a specific major at Southern Miss. Pre-cytotechnology students need sufficient elective hours (38) to achieve a total of 90 hours of acceptable transfer credit for the UMMC program.

**Strategy for Success**
- Students should focus on doing well in their studies.

**YEAR 2**

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<th>Spring</th>
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<tbody>
<tr>
<td>Natural science &amp; lab a, b</td>
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<td>4 h</td>
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<tr>
<td>4 required/elective courses c, f</td>
<td>4 required/elective courses c, f</td>
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<td>12-13 h</td>
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**Strategy for Success**
- Students continue to do well in their studies, particularly the required science courses.

**YEAR 3**

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<td>1-2 Natural science &amp; lab a, b</td>
<td>1-2 Natural science &amp; lab a, b</td>
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<td>4-8 h</td>
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Strategy for Success

• Students continue to do well in their studies, particularly the required science courses.

YEAR 4 (If pursuing an optional baccalaureate degree)

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<th>Fall</th>
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<td>Classes to fulfill major, minor</td>
<td>Classes to fulfill major, minor</td>
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THE APPLICATION PROCESS

The application process should begin in the Fall semester or early in the Spring semester of the third year (February 1 deadline). Or, students may apply any time after July 1 for the next admission year.

• Applicants must have completed (or be enrolled in) the minimum required courses.
• Applicants must complete a minimum of 90 hours of academic credit that include the prerequisite courses for the program (exclusive of physical education, military science, dogmatic religion and vocation courses) from a regionally accredited institution of higher learning.
• Applicants must have an overall GPA of at least 2.00 on a 4.00 scale.
• A minimum grade of C is required on each course accepted for transfer.
• If a course is repeated, both grades are used in calculating the GPA.
• Applicants must meet technical standards for the Cytotechnology program listed on their website.
• An interview with the Cytotechnology Admissions Committee is required.
• Admitted students must provide written confirmation of Hepatitis B vaccination or that they have begun a vaccination series.

THE INTERVIEW

Students are advised to practice their interview skills BEFORE attending their first interview.

• You may use the online Perfect Interview™ resource: http://www.perfectinterview.com/usm/
• Or, sign up for mock interviews through Career Services by calling 601-266-4153:
  • http://www.usm.edu/career-services/about-us
  • Dress professionally and act professionally at your interview.

FOR MORE INFORMATION ABOUT A CAREER IN HEALTH CARE, CONTACT THE PREPROFESSIONAL OFFICE

The Healthcare Preprofessional Office is located in Bobby Chain Technology Building (TEC) Room 103.

Website: http://www.usm.edu/science-technology/preprofessional

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