MAJOR MAP | 2019-2020

UTEPEDGE

YOUR CLASS SCHEDULE

- Take MATH 1508 or 1411 and BIOL 1305/1107 in the Fall semester.
- · If you are interested in an Early Acceptance Program, take CHEM 1305/1105 your first semester along with your math course; talk to your advisor about whether or not to also take biology.
- Take BIOL 1306/1108 and CHEM 1305/1105 in the Spring Semester.
- Investigate joining a FYRIS course in order to conduct hands-on research under the direction of a faculty member for course credit.

ACADEMIC ADVISING

- Meet with your advisor in the College of Science CORE (Central Office for Readiness & Engagement) at Bell Hall 100.
- Consult your degree plan for required courses. Pay special attention to classes that are only offered once a year.
- Watch your email for advising instructions
- Advising Tip Balance science/math and non-science courses.

ENRICHING EXPERIENCES

- Ask your advisor about joining a Learning Community.
- · Join the American Society for Microbiology.
- · Join the Medical Professions Organization if you are planning a career in any health profession.
- Apply for Summer Undergraduate Research Programs (info available at COURI and on the web).

LIFELONG **SUCCESS**

- · Research options for your post-graduate career. Explore careers, graduate school, or professional programs such as medical school.
- · Visit career fairs and expos and investigate career options.
- · Discover tutoring resources such as the University Writing Center and the Math Resource Center for Students.
- Register at the Career Center and obtain on-campus employment.
- Cultivate healthy lifestyle habits by
- visiting the Student Recreation Center.

- Take CHEM 1306 (General Chemistry 2) and MICR 2340-2141 (General Microbiology) during the fall semester.
- Take CHEM 2324 (Organic Chemistry 1) and BIOL 3314-3115 (Molecular Cell Biology) during the spring semester.
- Take MATH 1411 if you have not done so already.
- · Consult your degree plan for other required courses. Pay special attention to classes that are only offered once a year.
- Meet with your advisor in the College of Science CORE (Central Office for Readiness & Engagement) at Bell Hall 100.
- Watch your email for advising instructions and tips.
- Advising Tip General Chemistry 1 and 2 as well as General Microbiology are required to unlock 3000-level Microbiology courses.
- Investigate the COURI (Campus Office of Undergraduate Research Initiatives) website for on and off campus undergraduate research opportunities.
- Research is also available as a Special Problems course (3 credit hours count towards the degree).
- Also investigate paid summer undergradu ate research internships available across
- Discover volunteer opportunities through the Center for Civic Engagement.
- Continue to engage with the American Society for Microbiology.

- · Visit the University Career Center to develop your resume or CV.
- Identify scholarship opportunities through the Office of Scholarships.
- Reach out to the Medical Professionals Institute if you are planning a career in medicine, podiatry, dentistry, veterinary medicine, optometry, or a physician's assistant program. Begin shadowing early if preparing for medical school.

- · Take CHEM 2325 (Organic Chemistry 2) and a
- major menu elective during the fall. Take MICR 3343 (Pathogenic Microbiology) and/or MICR 3449 (Prokaryotic Molecular Genetics) in the spring (these courses are only offered in the spring).
- Take BIOL 3192 (Professional Development) either fall or spring.
- Consider taking BIOL 4398, Special Problems, to build lab experience with a faculty mentor. You can take up to three credit hours of Special Problems as a major menu elective.
- Consult your degree plan for required courses. Pay special attention to classes that are only offered once a year.

· Complete degree requirements and any

Take BIOL 4398, Special Problems, to

build lab experience with a faculty

hours of Special Problems.

sure to take Genetics, Medical

your Junior and Senior years.

mentor. You can take up to six credit

If planning to attend medical school, be

Parasitology, Medical Biology, and upper

division Anatomy and Physiology during

courses needed for graduate or

professional school.

- Attend group advising sessions in the Bioscience Research Building conference room. Group advising sessions are announced by email and advertised throughout the Department of Biological Sciences.
- Ask your advisor about taking entrance exams for graduate or professional school, such as the MCAT or GRE this year.
- Consult your degree plan for required courses. Pay special attention to classes that are only offered once a year. For example, MICR 3443 and 3449 are both offered in

Attend group advising sessions in the

room. Group advising sessions are

throughout the Department of

Biological Sciences.

announced by email and advertised

Apply for graduation by the deadline.

Consult your degree plan for required

that are only offered once a year.

courses. Pay special attention to classes

Bioscience Research Building conference

- · Cultivate a leadership role with the American Society for Microbiology.
- Apply to present your research at a regional or national conference, such as the Society for Advancement of Chicanos/Hispanics and Native Americans in Science, the Annual Biomedical Research Conference for Minority Students, and the Rio Grande Branch of the American Society for Microbiology.
- Apply for summer research programs, which are advertised throughout the Bioscience Research Building.
- Seek internship opportunities and investigate interning abroad.
- Participate in Project Move.
- · Expand your leadership efforts with the American Society for Microbiology.
- Apply to present your research at a regional or national conference, such as the Society for Advancement of Chicanos/Hispanics and Native Americans in Science, the Annual Biomedical Research Conference for Minority Students, and the Rio Grande Branch of the American Society for
- Explore internship opportunities with organizations such as NASA and the CDC.

- · Prepare for any necessary examinations for graduate or professional school. Set exam dates for the summer before Senior year in preparation for interviews and applications.
- Prepare all necessary applications for graduate and professional school.
- Ask your advisor about enrolling in a fast track graduate program.
- Cultivate professional relationships with faculty mentors to learn about undergraduate research opportunities.
- Maintain a clean record in preparation for research opportunities.
- · Submit applications for graduate or professional school during the fall and winter of your Senior year
- Attend career fairs in the fall and spring if pursuing employment.
- Reach out to UTEP faculty and mentors to secure references for graduate/professional school applications or employment efforts. Send out your CV when requesting a reference or letter of recommendation.
- Visit the University Career Center for a mock interview and resume/CV review.
- Consult faculty mentors about postbaccalaureate research opportunities at universities such as the University of New Mexico

UPDATED 06/22/2018

EDGE ADVANTAGES: CAREER POSSIBILITIES:

- Leadership
- Problem-solving
- Communication
- Entrepreneurship Social Responsibility
- Confidence
- Global Awareness
- Teamwork
- Critical Thinking

- Physician (M.D./D.O.) • Physician Assistant
- Optometrist
- Denstist

- Pharmacist
- · Research Scientist
- · Laboratory Technician

Veterinarian



Bachelor of Science in Biological Science CONCENTRATION IN MICROBIOLOGY

MAJOR MAP | 2019-2020



College of Science

Updated:

NCM 7-26-17

Bell Hall 100 747-5536 The University of Texas at El Paso El Paso, Texas 79968-0509 Bachelor of Science Degree Plan

Note: Unofficial - Based on New Catalog Microbiology (Applicable for Pre Med)

(120/37)

Name Address

Major: Microbiology Minor: No Mandatory Minor

Department Chair: Dr. Bruce Cushing College of Science Director of Advising: Dr. Tina Garza

At Least C grades in Lower Division Math courses & Core Curriculum At Leasst C grades in Lower division courses in the Major & Minor

At Least 2.0 GPA in the major and 2.0 overall GPA

Academic Advising: College of Science Advising Center

REQUIREMENTS ***

| | Items Subjects | Has | Needs | | Items Subjects | Has | Needs |
|---|---|-----|--|---|--|-----|----------|
| Α | General Education | | | В | MAJOR: Microbiology (42/30) | | |
| | (Minimum "C" grades required) | | | | BIOL 1305-1107 | | 4 |
| | | | | | BIOL 1306-1108 | | 4 |
| 1 | Communication: | | 6 | | BIOL 3314-3115 | | 4 |
| | COMM 1611, ESOL 1311, ESOL 1312, | | | | MICR 2340-2141 | | 4 |
| | RWS 1301, RWS 1302, RWS 1601 | | | | MICR 3343-3144 | | 4 |
| | , | | | | MICR 3345-3146 | | 4 |
| 2 | Mathematics | | | | MICR 3449 | | 4 |
| | MATH 1411 | | 4 | | MICR 4353-4154 | | 4 |
| | MATH 1312 or STAT 2480 | | 3 | | BIOL 3192 | | 1 |
| | | | | | At least 9 semester hours chosen from | | 9 |
| 3 | Life and Physical Sciences ** | | 8 | | BIOL 3318-3119, BIOL 3320, | | |
| | PHYS 2420 or PHYS 2320-2120 and | | | | BIOL 3330, BIOL 4322, BIOL 4388, | | |
| | PHYS 2421 or PHYS 2321-2121 or | | | | MICR 3328, MICR 4329, MICR 4351, | | |
| | PHYS 1403, PHYS 1404 | | | | MICR 4355, ZOOL 4384, ZOOL 3464 | | |
| | | | | | ZOOL 4380-4181 | | |
| 4 | Language, Philosophy, & Culture | | | | Highly Recommended: BIOL 4390, 4398 | | |
| 4 | | | 3 | | riigiiiy Necollilliellued. DIOL 4380, 4388 | | |
| | ENGL 2311, 2312 2313, 2314, 2318, HIST 2301, 2302, PHIL 1301, 2306 | | 3 | | | | |
| | | | | | | | |
| | FREN 2322, RS 1301, SPAN 2340, | | | _ | B : 101 :/ 0 | | |
| | WS 2300, WS 2350 | | 1 | С | Required Chemistry Courses | | . |
| | | | | - | CHEM 1305-1105 | | 4 |
| 5 | Creative Arts | | <u> </u> | - | CHEM 1306-1106 | | 4 |
| | ART 1300, ARTH 1305, ARTH 1306. | | 3 | | CHEM 2324-2124 | | 4 |
| | DANC 1304, FILM 1390, MUSL 1321, | | | | CHEM 2325-2125 | | 4 |
| | MUSL 1324, MUSL 1327, THEA 1313 | | | | CHEM 3330 or CHEM 3332 | | 3 |
| 6 | American History | | | | | | |
| | HIST 1301 | | 3 | D | Other Required Courses | | |
| | HIST 1302 | | 3 | | | | |
| 7 | Government/Political Science | | 1 | | | | |
| | POLS 2310 | | 3 | Е | Electives | | |
| | POLS 2311 | | 3 | | Upper Division Electives | | 4 |
| | | | | | Lower Division Electives | | 7 |
| 8 | Social and Behavioral Sciences | | | | | | |
| | ANTH 1301, 1302, 1310, 2320, CE 2326, | | 3 | | | | |
| | COMM 2350, 2372, ECON 2303, 2304, | | | F | Fast Track Biology Courses | | |
| | EDPC 1301, EDU 1342, ENGL 2320, | | 1 | | . act mack bloody coulded | | |
| | GEOG 1310, LING 2320, 2340, PSYC 1301, | | | | | | |
| | SOCI 1301, SOCI 1310 | | 1 | | | | |
| | | | | | | | |
| 9 | Component Area Option | | | | | | |
| | BUSN 1301, COMM 1301, COMM 1302, | | 6 | | | | |
| | CS 1310, CS 1320, SCI 1301, UNIV 1301 | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | TOTAL HOURS | 0 | 120 |

This Microbiology degree plan is just a sample. Your individualized degree plan may differ.

Dr. Nancy Marcus Associate Dean, College of Science