Naveen Jindal School of Management

Healthcare Management and Molecular Biology (Double Major) (BS)

Bachelor of Science in Healthcare Management and Molecular Biology (Double Major)

Degree Requirements (153 semester credit hours)\(^1,\ 2\)

JSOM Faculty


**Professor Emeritus:** Dale Osborne


**Associate Professors:** Nina Baranchuk, Norris Bruce, Huseyin Cavusoglu, Jianqing Chen, Zhonglan Dai, Xianjun Geng, Umit G. Gurun, J. Richard Harrison, Surya N. Janakiraman, Robert L. Kieschnick Jr., Nanda Kumar, Seung-Hyun Lee, Lívia Markóczy, Syam Menon, Toyah Miller, Alp Muharremoglu, Ramachandran (Ram) Natarajan, Valery Polkovnichenko, Ashutosh Prasad, Orlando C. Richard, Young U. Ryu, Gil Sadka, Jane Salk, David J. Springate, Kelsey D. Wei, Jun Xia, Ying Xie, Yexiao Xu, Alejandro Zentner, Yuan Zhang, Feng Zhao, Zhiqiang (Eric) Zheng, Yibin Zhou

**Clinical Associate Professors:** Sonia Leach, Carolyn Reichert, Kelly Slaughter, Mark Thouin, John McClain Watson

**Assistant Professors:** Mehmet Ayvacı, Emily Choi, Rebecca Files, Bernhard Ganglmair, Dorothée Honhon, Elisabeth Honka, Kyle Hyndman, Atanu Lahiri, Sheen Levine, Bin Li, Jun Li, Meng Li, Ningzhong Li, Virginie Lopez-Kidwell, Arzu Ozoguz, Anyan Qi, Alessio Saretto, Harpreet Singh, Gonca P. Soysal, Upender Subramanian, Shaojie Tang, Christian Von-Drathen, Malcolm Wardlaw,
Han (Victor) Xia, Shengqi Ye, Nir Yehuda, Jieying Zhang, Xiaofei Zhao

Clinical Assistant Professors: Hans-Joachim Adler, Shawn Alborz, Athena Alimirzaei, Moran Bluestein, John Gamino, Ayfer Gurun, Vance Lewis, Liping Ma, Dawn Owens, Anastasia V. Shcherbakova

Senior Lecturers: Arthur M. Agulnek, Semiramis Amirkour, Frank Anderson, Anindita Bardhan, Ronald Blair, Daniel Bochsler, Tiffany A. Bortz, Richard Bowen, Judd Bradbury, Monica E. Brussolo, George DeCourcy, Eugene (Gene) Deluke, Alexander Edsel, Amal El-Ashmawi, Carol Flannery, Mary Beth Goodrich, Maria Hasenhuttl, Julie Haworth, Thomas (Tom) Henderson, Jennifer G. Johnson, Lynn Carl Jones, Jackie Kimsey, Kristen Lawson, Chris Linsteadt, Diane S. McNulty, Madison Pedigo, Jared Pickens, Matt Polze, James Richards, Mark Salamasick, Avanti P. Sethi, Jeanne Sluder, Steven Solcher, Luell (Lou) Thompson, Amy L. Troutman, Robert Wright, Kathy Zolton

Visiting Faculty: Kyle Edgington

NSM Faculty

Professors: Lee A. Bulla, Rockford K. Draper, Juan E. González, Lawrence J. Reitzer, Stephen Spiro, Li Zhang, Michael Qiwei Zhang

Professors Emeritus: Hans Bremer, Donald M. Gray, Claud S. Rupert

Associate Professors: Gail A. M. Breen, John G. Burr, Jeff L. DeJong, Ernest M. Hannig, Tae Hoon Kim, Dennis L. Miller

Assistant Professors: Nikki Delk, Heng Du, Jung-whan (Jay) Kim, Kelli Palmer, Duane D. Winkler, Zhenyu Xuan, Hyuntae Yoo

Research Assistant Professors: Monique Duncan, Lan Guo

Senior Lecturers: Irina Borovkov, Mehmet Candans, Vincent P. Cirillo, Brenna Hill, Wen-Ju Lin, Robert C. Marsh, David Murchison, Jing Pan, Elizabeth Pickett, Ruben D. Ramirez, Scott A. Rippel, Elizabeth L. Rugg, Ilya Sapozhnikov, Uma Srikanth, Michelle Wilson, Wen-Ho Yu

Affiliated Faculty: Stephen D. Levene, Jonathan E. Ploski

I. Core Curriculum Requirements: 42 semester credit hours

Communication: 6 semester credit hours

COMM 1311 Survey of Oral and Technology-based Communication

RHET 1302 Rhetoric

Mathematics: 3 semester credit hours

MATH 2417 Calculus
Life and Physical Sciences: 6 semester credit hours

CHEM 1311 General Chemistry I\(^4\)
CHEM 1312 General Chemistry II\(^4\)

Language, Philosophy and Culture: 3 semester credit hours

Select any 3 semester credit hours from Language, Philosophy and Culture core courses (see advisor)

Creative Arts: 3 semester credit hours

Select any 3 semester credit hours from Creative Arts core courses (see advisor)

American History: 6 semester credit hours

Select any 6 semester credit hours from American History core courses (see advisor)

Government / Political Science: 6 semester credit hours

GOVT 2305 American National Government
GOVT 2306 State and Local Government

Social and Behavioral Sciences: 3 semester credit hours

ECON 2301 Principles of Macroeconomics\(^4,\,6\)

Component Area Option: 6 semester credit hours

MATH 2419 Calculus II\(^4,\,5\)
ECON 2302 Principles of Microeconomics\(^4,\,6\)

II. Major Requirements: 96 semester credit hours

Business Major Preparatory Courses: 16 semester credit hours beyond Core Curriculum

ACCT 2301 Introductory Financial Accounting\(^6\)
ACCT 2302 Introductory Management Accounting\(^6\)
HMGT 3100 Professional Development
BLAW 2301 Business and Public Law\(^6\)
ECON 2301 Principles of Macroeconomics\(^4,\,6\)
ECON 2302 Principles of Microeconomics\(^4,\,6\)
**OPRE 3333** Quantitative Business Analysis
or **MATH 2333** Matrices, Vectors, and Their Application

**OPRE 3360** Managerial Methods in Decision Making Under Uncertainty
or **STAT 2332** Introductory Statistics for Life Sciences
or **STAT 3360** Probability and Statistics for Management and Economics

**Business Core Courses: 27 semester credit hours**

- **BCOM 3310** Business Communication
- **BCOM 4350** Advanced Business Communication
- **FIN 3320** Business Finance
- **ITSS 3300** Information Technology for Business
- **OPRE 3310** Operations Management
- **OBHR 3310** Organizational Behavior
- **MKT 3300** Principles of Marketing
- **BPS 4305** Strategic Management
- **IMS 3310** International Business

**Biology Major Preparatory Courses: 20 semester credit hours beyond Core Curriculum**

- **CHEM 1111** General Chemistry Laboratory I
- **CHEM 1112** General Chemistry Laboratory II
- **CHEM 1311** General Chemistry I
- **CHEM 1312** General Chemistry II
- **CHEM 2123** Introductory Organic Chemistry Laboratory I
- **CHEM 2125** Introductory Organic Chemistry Laboratory II
- **CHEM 2323** Introductory Organic Chemistry I
- **CHEM 2325** Introductory Organic Chemistry II
- **MATH 2417** Calculus I
- **MATH 2419** Calculus II
- **PHYS 2325** Mechanics
- **PHYS 2125** Physics Laboratory I
- **PHYS 2326** Electromagnetism and Waves
PHYS 2126  Physics Laboratory II
BA 1100  Business Basics or NATS 1101  Natural Sciences and Mathematics Freshman Seminar
UNIV 1010  Freshman Seminar

Biology Core Courses: 33 semester credit hours

BIOL 2111  Introduction to Modern Biology Workshop I 6
BIOL 2112  Introduction to Modern Biology Workshop II 6
BIOL 2281  Introductory Biology Laboratory 6
BIOL 2311  Introduction to Modern Biology I 6
BIOL 2312  Introduction to Modern Biology II 6
BIOL 3101  Classical and Molecular Genetics Workshop
BIOL 3102  Eukaryotic Molecular and Cell Biology Workshop
BIOL 3161  Biochemistry Workshop I
BIOL 3162  Biochemistry Workshop II
BIOL 3301  Classical and Molecular Genetics
BIOL 3302  Eukaryotic Molecular and Cell Biology
BIOL 3361  Biochemistry I
BIOL 3362  Biochemistry II

or BIOL 3335  Microbial Physiology
BIOL 3380  Biochemistry Laboratory
BIOL 4461  Biophysical Chemistry

III. Elective Requirements: 15 semester credit hours

Healthcare Management Core Courses: 12 semester credit hours

HMGT 3301  Introduction to Healthcare Management
HMGT 3311  Healthcare Accounting
HMGT 4321  Introduction to Healthcare Information Systems
HMGT 3310  Healthcare Regulatory Environment

Biology (3 semester credit hours):

BIOL 4380  Cell and Molecular Biology Laboratory 8
**BIOL 3V96** Undergraduate Research in Molecular and Cell Biology

**BIOL 4391** Senior Research in Molecular and Cell Biology: Advanced Writing

**BIOL 4399** Senior Honors Research in Molecular and Cell Biology: Thesis/Advanced Writing

Each student is expected to complete a minimum of 160 hours of business-related work to fulfill the JSOM professional practicum requirement.

All students must complete at least 51 semester credit hours of upper-division courses to graduate.

1. Incoming freshmen must enroll and complete requirements of UNIV 1010 and the corresponding school-related freshman seminar course. Students, including transfer students, who complete their core curriculum at UT Dallas must take UNIV 2020.

2. Degree is 154 semester credit hours if students are required to take BA 1100 or NATS 1101

3. Curriculum Requirements can be fulfilled by other approved courses from institutions of higher education. The courses listed are recommended as the most efficient way to satisfy both Core Curriculum and Major Requirements at UT Dallas.

4. A required Major course that also fulfills a Core Curriculum requirement. Semester credit hours are counted in Core Curriculum.

5. Six semester credit hours of Calculus are counted under Mathematics Core and Component Area Option Core, and 2 semester credit hours of Calculus are counted as Biology Major Preparatory Courses.

6. Indicates a prerequisite class to be completed before enrolling for upper-division classes.

7. Students may substitute MATH 2418 or CS 2305.

8. Requires permission of the Biology Undergraduate Advisor to ensure training in recombinant DNA analysis.