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)

JSOM Faculty


Professor Emeritus: Dale Osborne


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

Assistant Professors: Mehmet Ayvaci, Emily Choi, Rebecca Files, Bernhard Ganglmair, Dorotheé 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 Amirpour, 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 Kimzey, Kristen Lawson, Chris Linsteadt, Diane S. McNulty, Madison Pedigo, Jared Pickens, Matt Polze, James Richards, Mark Salamasick, Avanti P. Sethi, Jeannie 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. Delong, 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 Candas, 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

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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
BIOL 2112  Introduction to Modern Biology Workshop II
BIOL 2281  Introductory Biology Laboratory
BIOL 2311  Introduction to Modern Biology I
BIOL 2312  Introduction to Modern Biology II
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

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

Biology (3 semester credit hours):

BIOL 4380  Cell and Molecular Biology Laboratory
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.