UNIV	Course Number	Course Title	Cr	Instructor	Fall 2017	Spring 18	Fall 18	Spring 19	Fall 19	Spring 20	Fall 20	Spring 21	Fall 21	Spring 22	Offrered Semester
Required Classes															
UND	EE590	Anatomy and Physiology for Biomedical Engineers	6	Reza Fazel-Rezai	X				X				X		Fall 2017
NDSU	ZOO660	Animal Physiology	3	Kendra Greenlee	X		X		X		X		X		Every Fall
UND	EE570	Seminar for Biomedical Engineers	1	Reza Fazel-Rezai	X				X		X		X		Fall 2017
UND	EE570	Seminar for Electrical Engineering	1	Sima Noghanian		X				X		X			Spring 2018
NDSU	ENGR790	Seminar	1												No regular schedule
Bioinstrumentation BRG															
UND	EE545	Introduction to Biomedical Engineering	3	Reza Fazel-Rezai											No regular schedule
UND	EE456	Digital Image Processing	3	Reza Fazel-Rezai		X				X				X	Spring 2018
UND	EE539	Electromagnetic Compatibility	3	Sima Noghanian											No regular schedule
UND	EE521	Digital Signal Processing	3	Reza Fazel-Rezai											No regular schedule
NDSU	ECE685	Biomedical Engineering	3	Keerthi Nawarathna		X		X		X		X		X	Every Spring
NDSU	ECE683	Instrumentation for Engineers	3												No regular schedule
UND	EE550	Biomedical Instrumentation	3	Reza Fazel-Rezai											No regular schedule
NDSU	ECE796	Biomedical Photonics	3	Reza Fazel-Rezai											No regular schedule
Biomaterials BRG															
UND	ChE505	Biochemical Engineering	3												No regular schedule
UND	EE545	Introduction to Biomedical Engineering	3	Reza Fazel-Rezai											No regular schedule
NDSU	ECE685	Biomedical Engineering	3	Keerthi Nawarathna		X		X		X		X		X	Every Spring
UND	ME490	Introduction to Biomaterial Science and Engineering	3	Surojit Gupta											No regular schedule
NDSU	CE725	Introduction to Biomaterials, Materials in Biomedical Eng.	3	Kalpana Katti	X		X		X		X		X		Every Fall
NDSU	CHEM665	Principles of Physical Chemistry and Biophysics	3	Kilina	X		X		X		X		X		Every Fall
NDSU	MN786	Tissue Engineering	3												No regular schedule
NDSU	MN785	Biocompatibility Testing	3												No regular schedule
NDSU	PSCI701	Quantitative Drug Design	2												No regular schedule
Biomechanics BRG															
UND	EE545	Introduction to Biomedical Engineering	3	Reza Fazel-Rezai											No regular schedule
UND	ME439	Introduction to Robotics	3	Jeremiah Neubert		X		X		X		X		X	Every Spring
NDSU	ECE485	Biomedical Engineering	3	Keerthi Nawarathna		X		X		X		X		X	Every Spring
NDSU	ME743	Biomechanics of Impact	3					X				X			Spring 2019; every other spring
NDSU	ME668	Introduction to Biomechanics	3	Yechun Wang	X		X		X		X		X		Every Fall
NDSU	ME680	Biofluid Mechanics	3					X				X			Spring 2019; every other spring
NDSU	ME755	Fluid Mechanics for Bio/Nanotechnologies	3				X				X				Fall 2018; every other fall.
UND	ME490	Introduction to Biomaterial Science and Engineering	3	Surojit Gupta											No regular schedule
UND	ME529	Advance Finite Elements Methods	3	George Bibel		X		X		X		X		X	Every Spring
Biosignals BRG															
UND	EE456	Digital Image Processing	3	Reza Fazel-Rezai		X				X				X	Spring 2018
UND	EE521	Digital Signal Processing	3	Reza Fazel-Rezai											No regular schedule
UND	EE454	Introduction to Biomedical Engineering	3	Reza Fazel-Rezai											No regular schedule
NDSU	ECE685	Biomedical Engineering	3	Keerthi Nawarathna		X		X		X		X		X	Every Spring
UND	EE508	Intelligent Decision Systems	3	Hossein Salehfar			X								Fall 2018
UND	EE590	Engineering Computation	3	Sima Noghanian	X				X				X		Fall 2017, Every other Fall
UND	EE539	Electromagnetic Compatibility	3	Sima Noghanian											No regular schedule
UND	EE590	Biomedical Signal Processing	3	Reza Fazel-Rezai											No regular schedule
Multi-scale system simulation and modeling BRG															
UND	EE545	Introduction to Biomedical Engineering	3	Reza Fazel-Rezai											No regular schedule
NDSU	ECE685	Biomedical Engineering	3	Keerthi Nawarathna		X		X		X		X		X	Every Spring
NDSU	ECE687	Cardiovascular Engineering I	3	Amanda Brooks	X		X		X		X		X		Every Fall
NDSU	ECE688	Advanced Cardiovascular Engineering II	3	Amanda Brooks		X		X		X		X		X	Every Spring
List of elective courses															
NDSU	BIOC716	Biochemistry of Proteins and Enzymes.	3												No regular schedule
NDSU	BIOC673	Methods of Biochemical Research	3	Colbert	X		X		X		X		X		Every Fall
NDSU	CPM771	Methods of Polymer Characterization	3				X				X				Fall 2018, Every other Fall
NDSU	CHEM685	Industrial Biotechnology	2												No regular schedule
NDSU	PSCI611	Pharmacodynamics and Applied Therapeutics	3		X		X		X		X		X		Every Fall
NDSU	Nusing814	Advanced Pathophysiology I	2		X		X		X		X		X		Every Fall
NDSU	Nusing816	Advanced Pathophysiology II	2			X		X		X		X		X	Every Spring
NDSU	Nusing706	Healthcare Delivery Systems, Financing, & Informatics	3	Barnacle	X		X		X		X		X		Every Fall
NDSU	Nusing702	Ethics/ Policy	2			X		X		X		X		X	Every Spring
NDSU	harmacy 68	Economic Outcomes Assessment													No regular schedule
UND	PPT500	Principles of Physiology and Pharmacology	6	James Haselton		X		X		X		X		X	Every Spring
UND	PPT503	Advanced Pharmacology or Physiology	3												No regular schedule
UND	PPT505	Research Techniques	1–3	Haselton	X	X	X	X	X	X	X	X	X	X	Every Semester
UND	BIMD510	Basic Biomedical Statistics	2	Clint Hosford		X		X		X		X		X	Every Spring
UND	BIMD516	Responsible Conduct of Research	1	Eric Murphy	X		X		X		X		X		Fall 2017
UND	N510	Advanced Physiology/Pathophysiology I	3	J. Sikkema, D. Thiele	X		X		X		X		X		Every Fall
UND	N511	Advanced Physiology/Pathophysiology II	3	J. Sikkema, D. Thiele		X		X		X		X		X	Every Spring
UND	N573	Research Grantsmanship	3	Rashid Ahmed	X		X		X		X		X		Fall 2017
UND	EE590	Machine Learning Applications in Biomedical Engineering	3	Kouhyar Tavakolian		X									Spring 2018
NDSU	BIOC 701	Comprehensive Biochem I	4	Sangita Sinha	X		X		X		X		X		Every Fall