Typically Offered: Fall, Spring, Summer.

studies, and other engaging activities.

explore misconduct through interactive video, written and video case
understand consequences of violations to individuals and society. We'll
You'll learn expectations and regulations that permeate science. You'll
Anyone conducting research using federal funding must study RCR.

Credit)

BSBT 6065 - Case Studies in Responsible Conduct of Research (1 Credit)
Anyone conducting research using federal funding must study RCR.
You'll learn expectations and regulations that permeate science. You'll
understand consequences of violations to individuals and society. We'll
explore misconduct through interactive video, written and video case
studies, and other engaging activities.

Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6066 - Independent Study (1-3 Credits)
The Course BSBT 6066, Independent Study, with allow graduate
students to explore independently new avenues and opportunities that
complement their education and training in a way that is otherwise not
offered in required or elective courses of the BSBT Program. Enrollment
with permission only. Requisite: With permission only
Grading Basis: Letter Grade with IP
Repeatable. Max Credits: 3.
Typically Offered: Fall, Spring.

BSBT 6067 - Statistics for Biomedical Sciences (2 Credits)
Learn how and when to apply statistical procedures to answer scientific
questions relevant to biomedicine, and how to critically assess statistical
data for validity.

Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6068 - Laboratory Research in Structural Biology (1-6 Credits)
The Course BSBT 6068, Laboratory Research, with allow graduate
students to engage in laboratory research training in the biomedical
sciences with focus on structural biology.

Grading Basis: Letter Grade
Repeatable. Max Credits: 15.
Typically Offered: Fall, Spring, Summer.

BSBT 6069 - Laboratory Research in Immunology and Microbiology (1-6 Credits)
The Course BSBT 6069, Laboratory Research, with allow graduate
students to engage in laboratory research training in the biomedical
sciences with focus on immunology and microbiology.

Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6070 - Mini-Research Rotations (1-3 Credits)
The Course BSBT 6070, Mini-Research Rotations, with allow graduate
students to learn in three different laboratories about research in
immunology and microbiology.

Grading Basis: Letter Grade with IP
Typically Offered: Fall, Spring.

BSBT 6071 - Introduction to R Programming (1 Credit)
Introduction to the statistical programming language R geared primarily
to biomedical science students with little to no previous programming
experience. Basic features of R as a programming language and as
scientific computing platform. Basics of data cleaning, visualization, and
analysis.

Grading Basis: Letter Grade
Typically Offered: Spring.

BSBT 6072 - Foundations in Biochemistry (1.5 Credits)
This short course provides a condensed and fast-paced overview of
the fundamentals in biochemistry including research strategies and
techniques. The course aims to enhance the students' ability to engage in
critical scientific reasoning and problem-solving and to prepare students
for the scientific analyses and discussions.

Grading Basis: Letter Grade
Typically Offered: Fall.

BSBT 6062 - Principles & Strategies of Effective Teaching (1 Credit)
Introduces students to research-based, student-centered pedagogies and
instructional design techniques. Encourages students to view teaching
as an intellectual endeavor. Learn about useful resources for future
teaching and formally document pedagogical knowledge and skills for
employability. Intensive 1-credit course.

Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6063 - Speaking & Presenting for Scientists & Educators (1 Credit)
Science Communication in the form of speeches and presentations
is essential to the research endeavor. The course will increase your
effectiveness to deliver scientific, medical, or educational presentations
in an audience-centered and impactful way; to respond to audience
questions; and to facilitate audience engagement & discussion.

Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6064 - Scientific Writing (1 Credit)
Taught by a biomedical researcher and a professional writing instructor,
this 15-hour (3-week) course focuses on developing a framework for
successful scientific writing practices, including how to effectively
structure arguments, how to write grant proposals and more.

Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6067 - Statistics for Biomedical Sciences (2 Credits)
Learn how and when to apply statistical procedures to answer scientific
questions relevant to biomedicine, and how to critically assess statistical
data for validity.

Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6068 - Laboratory Research in Structural Biology (1-6 Credits)
The Course BSBT 6068, Laboratory Research, with allow graduate
students to engage in laboratory research training in the biomedical
sciences with focus on structural biology.

Grading Basis: Letter Grade
Repeatable. Max Credits: 15.
Typically Offered: Fall, Spring, Summer.

BSBT 6069 - Laboratory Research in Immunology and Microbiology (1-6 Credits)
The Course BSBT 6069, Laboratory Research, with allow graduate
students to engage in laboratory research training in the biomedical
sciences with focus on immunology and microbiology.

Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6070 - Mini-Research Rotations (1-3 Credits)
The Course BSBT 6070, Mini-Research Rotations, with allow graduate
students to learn in three different laboratories about research in
immunology and microbiology.

Grading Basis: Letter Grade with IP
Typically Offered: Fall, Spring.

BSBT 6071 - Introduction to R Programming (1 Credit)
Introduction to the statistical programming language R geared primarily
to biomedical science students with little to no previous programming
experience. Basic features of R as a programming language and as
scientific computing platform. Basics of data cleaning, visualization, and
analysis.

Grading Basis: Letter Grade
Typically Offered: Spring.

BSBT 6072 - Foundations in Biochemistry (1.5 Credits)
This short course provides a condensed and fast-paced overview of
the fundamentals in biochemistry including research strategies and
techniques. The course aims to enhance the students' ability to engage in
critical scientific reasoning and problem-solving and to prepare students
for the scientific analyses and discussions.

Grading Basis: Letter Grade
Typically Offered: Fall.
BSBT 6073 - Foundations in Molecular Biology (1.5 Credits)
This short course provides a condensed and fast-paced overview of the fundamentals in molecular biology including research strategies and techniques. The course aims to enhance the students' ability to engage in critical scientific reasoning and problem-solving and to prepare students for the scientific analyses and discussions.
Grading Basis: Letter Grade
Typically Offered: Fall.

BSBT 6074 - Foundations in Cell Biology (1.5 Credits)
This short course provides a condensed and fast-paced overview of the fundamentals in cell biology including research strategies and techniques. The course aims to enhance the students' ability to engage in critical scientific reasoning and problem-solving and to prepare students for the scientific analyses and discussions.
Grading Basis: Letter Grade
Typically Offered: Fall.

BSBT 6075 - Foundations in Genetics (1.5 Credits)
This short course provides a condensed and fast-paced overview of the fundamentals in genetics including research strategies and techniques. The course aims to enhance the students' ability to engage in critical scientific reasoning and problem-solving and to prepare students for the scientific analyses and discussions.
Grading Basis: Letter Grade
Typically Offered: Fall.

BSBT 6076 - Research Explorations (1 Credit)
This course allows for exploration of SBB research labs in a "mini-rotation" format, through meeting faculty, reading literature and participating in lab group meetings and research in order to choose a research lab and prepare a short research proposal.
Grading Basis: Letter Grade
Typically Offered: Fall.

BSBT 6077 - Seminar in Immunology and Microbiology (1 Credit)
This course provides students in the Bioinformatics in Immunology/ Microbiology program an integration of didactic knowledge with research approaches to outstanding questions in the field. Students will attend department weekly seminar followed by structured discussion.
Prerequisites - IDPT 7810 & IMMU 7630
Grading Basis: Letter Grade
Typically Offered: Fall, Spring.

BSBT 6078 - Introduction to Biocomputing (3 Credits)
The Leadership in a Global Environment course seeks to offer students a foundation for understanding the intricate and complex relationship between language, culture, communicative practices, and the role we play as individuals in the globalized work environment of today. In particular, this course is geared to emerging and developing global leaders. Today's leaders must be incredibly versatile. In fact, the entire management team needs to be able to link their industry science with value in the marketplace and tell a compelling story about what makes not just the innovation but also the company itself, special. Sometimes investors are very focused on the science of the products, and sometimes on the finance, so company leaders have to be prepared to talk about either or both. Today's leaders must be transversal: highly strategic and operational while able to understand and connect clinical, market access, commercial, finance, and strategy. The Leadership in a Global Environment course seeks to offer students a foundation for understanding the intricate and complex relationship between language, culture, communicative practices, and the role we play as individuals in the globalized work environment of today. In particular, this course is geared to emerging and developing global leaders. Today's leaders must be incredibly versatile. In fact, the entire management team needs to be able to link their industry science with value in the marketplace and tell a compelling story about what makes not just the innovation but also the company itself, special. Sometimes investors are very focused on the science of the products, and sometimes on the finance, so company leaders have to be prepared to talk about either or both. Today's leaders must be transversal: highly strategic and operational while able to understand and connect clinical, market access, commercial, finance, and strategy.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

BSBT 6079 - Leadership in a Global Environment (3 Credits)
The Leadership in a Global Environment course seeks to offer students a foundation for understanding the intricate and complex relationship between language, culture, communicative practices, and the role we play as individuals in the globalized work environment of today. In particular, this course is geared to emerging and developing global leaders. Today's leaders must be incredibly versatile. In fact, the entire management team needs to be able to link their industry science with value in the marketplace and tell a compelling story about what makes not just the innovation but also the company itself, special. Sometimes investors are very focused on the science of the products, and sometimes on the finance, so company leaders have to be prepared to talk about either or both. Today's leaders must be transversal: highly strategic and operational while able to understand and connect clinical, market access, commercial, finance, and strategy.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

BSBT 6110 - Introduction to Biocomputing (3 Credits)
This course provides students with hands on experience in basic computation, database, and programming skills set as a pre-requisite for a higher level data analysis course. The students will use example in the context of biomedical and genomic data set. Prerequisite: Undergraduate degree in science, technology, business, engineering or math.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

BSBT 6111 - Introduction to Biomedical Data Practices (2 Credits)
This course provides students with advance knowledge and topics in every aspects of data science.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

BSBT 6112 - Introduction to Biocomputing (2 Credits)
This course provides students with hands on experience in basic computation, database, and programming skills set as a pre-requisite for a higher level data analysis course. The students will use example in the context of biomedical and genomic data set. Prerequisite: Must be simultaneously enrolled in BSBT 6113.
Grading Basis: Letter Grade
Typically Offered: Fall.
BSBT 6113 - Data Science with R (1 Credit)
In this 4 weeks semi-independent study course, you will learn how to use
the “tidyverse” programming paradigm to perform data science operation
using the programming language R. At the end of the course, you will
learn the basic understanding of the fundamental elements of data
science, including; wrangling, exploration, visualization and modeling.
Grading Basis: Letter Grade
Typically Offered: Fall.

BSBT 6310 - Practical Clinical Research Informatics (3 Credits)
This course provides students with hands on experience in clinical
research informatics involving secondary use of electronic health record
(EHR) data, clinical informatics databases, and basic clinical data
science as preparation for more advanced informatics or data science
coursework. Requisite: 008754 A-GRAD
Grading Basis: Letter Grade
Typically Offered: Spring.

BSBT 6801 - Biomedical Entrepreneurship (3 Credits)
The course addresses the essential elements of bioscience and health
innovation and entrepreneurship. Prerequisites: An undergraduate degree
in science, technology, business, engineering or math. Cross-listed with
ENTP 6801
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

BSBT 6802 - Reg Env of Life Science Innovation - Drug Discovery (1.5
Credits)
This course is designed to familiarize biomedical scientists and those
interested in the business of science with the fundamentals of U.S. and
international regulatory affairs regarding drug development. Focus is the
development of products, such as drugs, devices, diagnostic tests, and
health information software, to receive U.S. and international regulatory
clearance or approval for commercialization.
Grading Basis: Letter Grade
Typically Offered: Fall, Summer.

BSBT 6804 - Bioinnovation Regulations (3 Credits)
This course is designed to familiarize biomedical scientists and those
interested in the business of science with the fundamentals of U.S. and
international regulatory affairs regarding drug discovery and medical
devices. Focus is the development of products, such as drugs, devices,
diagnostic tests, and health information software, to receive U.S. and
international regulatory clearance or approval for commercialization.
Grading Basis: Letter Grade
Typically Offered: Fall.

BSBT 6939 - Internship - Technology and Innovation (3-6 Credits)
The internship provides hands-on learning opportunities for graduate
students in institutions related to technology/biotechnology, computer
science, engineering, innovation and entrepreneurship. Requisite:
(Formerly IDPT 6939) Enrollment with permission only, contact
inge.wefes@ucdenver.edu. Instructor Consent required.
Grading Basis: Letter Grade with IP
A-GRAD Restricted to graduate students only.
Additional Information: Report as Full Time.
Typically Offered: Fall, Spring, Summer.

BSBT 6950 - Laboratory Thesis Research (1-6 Credits)
Laboratory Thesis Research with allow graduate students to engage in
laboratory research training in the biomedical science.
Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 7646 - Tissue Biology and Disease Mechanism (1 Credit)
This course provides an overview of organ systems and through 1)
a survey of the major systems, including the cellular and molecular
mechanisms underlying their function and repair, integrated with 2)
common diseases, current therapies, and their mechanistic basis. Prereq:
IDPT 7811, 7812, 7813, 7814, 7815 (BIOM Sci Core Courses).
Grading Basis: Letter Grade
Typically Offered: Fall.