UC Berkeley-UCSF Joint Medical Program (JMP)

The UC Berkeley-UCSF Joint Medical Program (JMP) is a five-year graduate/medical degree program. The pre-clerkship years are spent at UC Berkeley, engaging in a leading-edge integrated Problem-Based Learning medical curriculum while simultaneously earning a master's degree (MS) in the Health and Medical Sciences at UC Berkeley's School of Public Health. For their MS degrees, students can pursue research in any field of knowledge with a link to human health. After 2.5 years, our students move across the bay to UCSF to finish their medical education and receive their MDs.

Curriculum

HMEDSCI 261 Research Seminar (2 semesters) 2
PB HLTH 250A Epidemiologic Methods I (250B also meets requirement) 3
or PB HLTH 250B Epidemiologic Methods II

HMEDSCI 262 Qualitative Analysis Thesis Working Group (4 semesters) 4
or HMEDSCI 264 Mixed Methods/Community-Based Research Thesis Working Group

or HMEDSCI 265 Epidemiology/Reproductive Health/Evaluation Research Thesis Working Group

or HMEDSCI 267 Bioethics, Medical Humanities, or Archival Thesis Working Group

Upper division or graduate level Biostatistics course
Graduate Elective in research methods, approved by thesis adviser
Graduate Electives in content area of research
Summer field research elective

Capstone/Thesis (Plan I)

A JMP student’s MS coursework and research culminates in the crafting of a thesis, including an in-depth literature review of the student’s area of expertise and a scholarly product, often a manuscript for submission to a journal. Students can pursue research in any field of knowledge with a link to human health. A database of prior JMP research theses can be accessed at: http://escholarship.org/uc/ucb_ucsf_joint_medical_program

Health and Medical Sciences Program

HMEDSCI 200A PBL Classroom 10 Units
Terms offered: Fall 2006, Fall 2005, Fall 2004
The six semester sequence (200A-200F) introducing principles of the medical basic science, health policy, public health, and clinical aspects of medicine taught in a contextual-integrated case-based format. The sequence includes curriculum in biochemistry, histology, microbiology, immunology, neuroanatomy, pathology, physiology, pharmacology, and clinical sciences.
PBL Classroom: Read More [+]

Rules & Requirements

Prerequisites: Graduate standing in Health and Medical Science Joint Medical Program

Hours & Format

Fall and/or spring: 15 weeks - 10.5 hours of seminar per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate

Grading: Letter grade.
PBL Classroom: Read Less [-]

HMEDSCI 200B Contextual Integrated Case-Based Curriculum 10 Units
Terms offered: Spring 2007, Spring 2006, Spring 2005
The six semester sequence (200A-200F) introducing principles of the medical basic science, health policy, public health, and clinical aspects of medicine taught in a contextual-integrated case-based format. The sequence includes curriculum in biochemistry, histology, microbiology, immunology, neuroanatomy, pathology, physiology, pharmacology, and clinical sciences.
Contextual Integrated Case-Based Curriculum: Read More [+]

Rules & Requirements

Prerequisites: Graduate standing in Health and Medical Science Joint Medical Program

Hours & Format

Fall and/or spring: 15 weeks - 10.5 hours of seminar per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate

Grading: Letter grade.
Contextual Integrated Case-Based Curriculum: Read Less [-]
HMEDSCI 200C Problem Based Learning Classroom 10 Units
Terms offered: Fall 2006, Fall 2005, Fall 2004
The six semester sequence (200A-200F) introducing principles of the medical basic science, health policy, public health, and clinical aspects of medicine taught in a contextual-integrated case-based format. The sequence includes curriculum in biochemistry, histology, microbiology, immunology, neuroanatomy, pathology, physiology, pharmacology, and clinical sciences.

Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Science Joint Medical Program

Hours & Format
Fall and/or spring: 15 weeks - 10.5 hours of seminar per week

Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.

Problem Based Learning Classroom: Read More [+]

HMEDSCI 200D Problem Based Learning Classroom 10 Units
The six semester sequence (200A-200F) introducing principles of the medical basic science, health policy, public health, and clinical aspects of medicine taught in a contextual-integrated case-based format. The sequence includes curriculum in biochemistry, histology, microbiology, immunology, neuroanatomy, pathology, physiology, pharmacology, and clinical sciences.

Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Science Joint Medical Program

Hours & Format
Fall and/or spring: 15 weeks - 10.5 hours of seminar per week

Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.

Problem Based Learning Classroom: Read Less [-]

HMEDSCI 200E Problem Based Learning Classroom 10 Units
Terms offered: Fall 2006, Fall 2005, Fall 2004
The six semester sequence (200A-200F) introducing principles of the medical basic science, health policy, public health, and clinical aspects of medicine taught in a contextual-integrated case-based format. The sequence includes curriculum in biochemistry, histology, microbiology, immunology, neuroanatomy, pathology, physiology, pharmacology, and clinical sciences.

Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Science Joint Medical Program

Hours & Format
Fall and/or spring: 15 weeks - 10.5 hours of seminar per week

Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.

Problem Based Learning Classroom: Read More [+]

HMEDSCI 200F Contextual Integrated Case-Based Curriculum 7 Units
Terms offered: Spring 2007, Spring 2006, Spring 2005
The six semester sequence (200A-200F) introducing principles of the medical basic science, health policy, public health, and clinical aspects of medicine taught in a contextual-integrated case-based format. The sequence includes curriculum in biochemistry, histology, microbiology, immunology, neuroanatomy, pathology, physiology, pharmacology, and clinical sciences.

Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Science Joint Medical Program

Hours & Format
Fall and/or spring: 15 weeks - 10.5 hours of seminar per week

Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.

Contextual Integrated Case-Based Curriculum: Read More [+]

Contextual Integrated Case-Based Curriculum: Read Less [-]
HMEDSCI 202A Clinical Skills 1 2 Units
Terms offered: Fall 2017, Fall 2016, Fall 2006
The first course in a six-semester sequence introducing first-year medical students to the skills necessary to obtain a complete medical history, to manage successfully the dynamics of the doctor-patient interaction, and to master interpersonal communication skills required of doctors in a clinical setting.
Clinical Skills 1: Read More [+]
Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Sciences Joint Medical Program
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of seminar per week
Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Instructor: Micco
Clinical Skills 1: Read Less [-]

HMEDSCI 202B Clinical Skills 2 2 Units
Terms offered: Spring 2007, Spring 2006, Spring 2005
Students learn the cardiovascular, pulmonary, eye, and gastrointestinal exam and practice a complete medical history and physical exam with their preceptor. The dynamics of the physician-patient relationship are discussed on an ongoing basis with both the preceptor and the faculty instructor. Each student is required to turn in at least five patient write-ups per term.
Clinical Skills 2: Read More [+]
Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Sciences Joint Medical Program and completion of all requirements of Health and Medical Sciences 202A
Hours & Format
Fall and/or spring: 8 weeks - 3 hours of lecture per week
Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Instructors: Stevens, Swartzberg
Clinical Skills 2: Read Less [-]

HMEDSCI 202C Clinical Skills 3 2 Units
Terms offered: Fall 2017, Fall 2016, Fall 2007
Students learn the neurologic, musculo-skeletal, ear, nose, throat, thyroid, and skin exam and practice the medical history and physical exam with their preceptor. The dynamics of the physician-patient relationship are discussed on an ongoing basis. Each student is required to turn in at least five patient write-ups per term.
Clinical Skills 3: Read More [+]
Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Sciences Joint Medical Program and completion of all requirements of Health and Medical Sciences 202A and 202B
Hours & Format
Fall and/or spring: 8 weeks - 3 hours of lecture per week
Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Instructors: Stevens, Swartzberg
Clinical Skills 3: Read Less [-]

HMEDSCI 202D Clinical Skills 4 2 Units
Students learn the male genito-urinary exam and practice the complete medical history and physical exam with their preceptor. The dynamics of the physician-patient relationship are discussed on an ongoing basis. Each student is required to turn in at least five patient write-ups per term.
Clinical Skills 4: Read More [+]
Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Sciences Joint Medical Program and completion of all requirements of Health and Medical Sciences 202C
Hours & Format
Fall and/or spring: 12 weeks - 3 hours of lecture per week
Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Instructor: Stevens, Swartzberg
Clinical Skills 4: Read Less [-]
**HMEDSCI 202E Clinical Skills 5 2 Units**
Terms offered: Fall 2006, Fall 2005, Fall 2004
Students learn the gynecologic exam and practice the complete medical history and physical exam with their preceptor. The dynamics of the physician-patient relationship are discussed on an ongoing basis. Each student is required to turn in at least five patient write-ups per term.

Clinical Skills 5: Read More [+]

**Rules & Requirements**

**Prerequisites:** Graduate standing in Health and Medical Sciences Joint Medical Program and completion of all requirements of Health and Medical Sciences 202C and 202D

**Hours & Format**

Fall and/or spring: 12 weeks - 3 hours of lecture per week

**Additional Details**

**Subject/Course Level:** Health and Medical Sciences/Graduate

**Grading:** Letter grade.

**Instructors:** Stevens, Swartzberg

Clinical Skills 5: Read Less [-]

**HMEDSCI 202F Clinical Skills 6 1 Unit**
Terms offered: Spring 2007, Spring 2006, Spring 2005
Under supervision, students perform a complete history and physical exam on hospitalized or clinic patients five times during the semester. They present the patients in written and verbal format to the instructor and class. These presentations are critiqued and the tools to effectively present cases are taught. The course runs for the first half of the student's last semester in the program. Each student is required to turn in three patient write-ups.

Clinical Skills 6: Read More [+]

**Rules & Requirements**

**Prerequisites:** Graduate standing in HMS Joint Medical Program

**Hours & Format**

Fall and/or spring: 12 weeks - 3 hours of lecture per week

**Additional Details**

**Subject/Course Level:** Health and Medical Sciences/Graduate

**Grading:** Letter grade.

**Instructors:** Stevens, Swartzberg

Clinical Skills 6: Read Less [-]

**HMEDSCI 203 Introduction to Clinical Radiology/Anatomy Correlates 1 Unit**
Terms offered: Summer 2015 10 Week Session, Summer 2006 10 Week Session, Summer 2005 10 Week Session
An introduction for medical students to the study of radiology and the examination of healthy and diseased organs by imaging techniques, correlated with the Gross Anatomy and Anatomy of Human Development courses. Areas that will be covered include introduction to the major organ systems through the use of radiographs.

Introduction to Clinical Radiology/Anatomy Correlates: Read More [+]

**Rules & Requirements**

**Prerequisites:** Graduate standing in HMS Joint Medical Program; must be taken concurrently with 201 and 202

**Hours & Format**

Summer: 8 weeks - 0 hours of lecture per week

**Additional Details**

**Subject/Course Level:** Health and Medical Sciences/Graduate

**Grading:** Offered for satisfactory/unsatisfactory grade only.

**Instructor:** Price

Introduction to Clinical Radiology/Anatomy Correlates: Read Less [-]

**HMEDSCI 211 Narrative and Medicine 1 Unit**
This course's goal is to provide a method for medical students to think, write about, and discuss feelings engendered by clinical encounters. Medical students are taught the need to be emotionally detached from patients, yet being emotionally detached does not mean devoid of emotion. This course offers a means to express and analyze those feelings. Also considered is the value of regarding the medical history as "text" which can be written and read from differing, equally valid viewpoints.

Narrative and Medicine: Read More [+]

**Rules & Requirements**

**Prerequisites:** Graduate standing in health and medical sciences or consent of instructor

**Repeat rules:** Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

**Hours & Format**

Fall and/or spring: 15 weeks - 1 hour of seminar per week

**Additional Details**

**Subject/Course Level:** Health and Medical Sciences/Graduate

**Grading:** Letter grade.

**Instructor:** Micco

Narrative and Medicine: Read Less [-]
HMEDSCI 216 Clinical Medicine 4 Units
Terms offered: Not yet offered
Clinical Medicine at the JMP is designed to learn and practice the basic skills, knowledge and professionalism needed for the practice of medicine. Students enroll in the course for four consecutive semesters during their first and second years.
Clinical Medicine: Read More [+]
Rules & Requirements
Prerequisites: HMS 214

Hours & Format
Fall and/or spring: 15 weeks - 6 hours of seminar per week

Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Instructors: Swartzberg, Mays, Olson
Clinical Medicine: Read Less [-]

HMEDSCI 261 Research Seminar 2 Units
Terms offered: Summer 2015 10 Week Session, Spring 2013, Spring 2010
A seminar to help Joint Medical Program students acquire skills necessary to define a research question, find appropriate mentorship, and design a research project. Summer course introduces research design, methods, and expectations for M.S. research in Health and Medical Sciences. Fall and spring semesters address topics in research; student progress toward M.S. thesis is reviewed and critiqued. Development of research plan, protocol design and implementation, and research findings will be reviewed. Each student takes this course three times in the first year.
Research Seminar: Read More [+]
Rules & Requirements
Prerequisites: Graduate standing in Health and Medical Sciences UCB-UCSF Joint Medical Program

Hours & Format
Fall and/or spring: 15 weeks - 2 hours of seminar per week
Summer: 8 weeks - 6 hours of seminar per week

Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Instructor: Eyre
Research Seminar: Read Less [-]

HMEDSCI 262 Qualitative Analysis Thesis Working Group 3 - 4 Units
The Qualitative Analysis TWG provides JMP students a supportive small group student-centered environment in which to discuss their qualitative research with other students engaged in qualitative research towards the goal of the successful completion of the required JMP MS.
Qualitative Analysis Thesis Working Group: Read More [+]
Objectives Outcomes
Course Objectives: To develop specific skills in qualitative research design, data collection, analysis, presentation and publication, areas of emphasis will include: 1) grounded theory research and analysis and 2) cultural research and analysis To give students a supportive environment in which to discuss their research with students and faculty who are engaged in similar research. To give students the opportunity to provide peer advising to their classmates regarding their research projects. To provide students with individual mentoring by TWG leaders during outside sessions planned between faculty and students To support students in developing skills in working with a mentor, developing a research design, obtaining IRB approval, collecting and analyzing data, managing a research project, presenting findings as posters or oral presentations, and drafting a master’s thesis and/or publication

Rules & Requirements
Prerequisites: 2nd year students-HMS 261 completed with no incompletes<BR/>3rd year students-prior HMS 262 completed with no incompletes
Repeat rules: Course may be repeated a maximum of 4 times.

Hours & Format
Fall and/or spring: 15 weeks - 3-5 hours of seminar per week

Additional Details
Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Instructor: Eyre
Qualitative Analysis Thesis Working Group: Read Less [-]
HMEDSCI 264 Mixed Methods/Community-Based Research Thesis Working Group 3 - 4 Units

Terms offered: Not yet offered
The Mixed Methods/Community-based Research TWG provides JMP students a supportive small group student-centered environment in which to discuss their research with other students engaged or interested in mixed methods/community-based research projects towards the goal of the successful completion of the required JMP MS.
Mixed Methods/Community-Based Research Thesis Working Group: Read More [+]

Objectives Outcomes

Course Objectives: To develop specific skills in mixed methods research and community-based research design, planning and implementation, data collection, analysis, presentation and publication. To give students a supportive environment in which to discuss their research with students and faculty who are engaged in similar research. To give students the opportunity to provide peer advising to their classmates regarding their research projects. To provide students with individual mentoring by TWG leaders during outside sessions planned between faculty and students. To support students in developing skills in working with a mentor, developing a research design, obtaining IRB approval, collecting and analyzing data, managing a research project, presenting findings as posters or oral presentations, and drafting a master’s thesis and/or publication.

Rules & Requirements

Prerequisites: 2nd year students-HMS 261 completed with no incompletes	3rd year students-prior HMS 264 completed with no incompletes

Repeat rules: Course may be repeated a maximum of 4 times.

Hours & Format

Fall and/or spring: 15 weeks - 3-5 hours of seminar per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate

Grading: Letter grade.

Instructor: Ivey

Mixed Methods/Community-Based Research Thesis Working Group: Read Less [-]

HMEDSCI 265 Epidemiology/Reproductive Health/Evaluation Research Thesis Working Group 3 - 4 Units

Terms offered: Not yet offered
The Epidemiology/Reproductive Health/ Evaluation TWG provides JMP students a supportive small group student-centered environment in which to discuss their research with other students engaged in Epidemiology/Reproductive Health/ Evaluation projects towards the goal of the successful completion of the required JMP MS.
Epidemiology/Reproductive Health/Evaluation Research Thesis Working Group: Read More [+]

Objectives Outcomes

Course Objectives: To develop specific skills in Epidemiology/Reproductive Health/ Evaluation research design, planning and implementation, data collection, analysis, presentation and publication. To give students a supportive environment in which to discuss their research with students and faculty who are engaged in similar research. To give students the opportunity to provide peer advising to their classmates regarding their research projects. To provide students with individual mentoring by TWG leaders during outside sessions planned between faculty and students. To support students in developing skills in working with a mentor, developing a research design, obtaining IRB approval, collecting and analyzing data, managing a research project, presenting findings as posters or oral presentations, presenting research to the community, and drafting a master’s thesis and/or publication.

Rules & Requirements

Prerequisites: 2nd year students-HMS 261 completed with no incompletes	3rd year students-prior HMS 265 completed with no incompletes

Repeat rules: Course may be repeated a maximum of 4 times.

Hours & Format

Fall and/or spring: 15 weeks - 3-5 hours of seminar per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate

Grading: Letter grade.

Instructor: Prata

Epidemiology/Reproductive Health/Evaluation Research Thesis Working Group: Read Less [-]
HMEDSCI 266 Clinical Medicine/Bench Research/Clinical Epi/Behavioral Thesis Working Group 3 - 4 Units

Terms offered: Summer 1998 10 Week Session, Spring 1998, Summer 1997 10 Week Session

The Clinical Medicine/Bench Research/Clinical Epi/Behavioral TWG provides JMP students a supportive small group student-centered environment in which to discuss their Clinical Medicine/Bench Research/ Clinical Epi/Behavioral projects towards the goal of the successful completion of the required JMP MS.

Clinical Medicine/Bench Research/Clinical Epi/Behavioral Thesis Working Group: Read More [+]

Objectives Outcomes

Course Objectives:
To develop specific skills in Clinical Medicine/Bench Research/Clinical Epi/Behavioral TWG research design, planning and implementation, data collection, analysis, presentation and publication.
To give students a supportive environment in which to discuss their research with students and faculty who are engaged in similar research.
To give students the opportunity to provide peer advising to their classmates regarding their research projects.
To provide students with individual mentoring by TWG leaders during outside sessions planned between faculty and students.
To support students in developing skills in working with a mentor, developing a research design, obtaining IRB approval, collecting and analyzing data, managing a research project, presenting findings as posters or oral presentations, and drafting a master's thesis and/or publication.

Rules & Requirements

Prerequisites: 2nd year students-HMS 261 completed with no incompletes
3rd year students-prior HMS 266 completed with no incompletes

Repeat rules: Course may be repeated a maximum of 4 times.

Hours & Format

Fall and/or spring: 15 weeks - 3-5 hours of seminar per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate

Grading: Letter grade.

Instructor: Madsen

Clinical Medicine/Bench Research/Clinical Epi/Behavioral Thesis Working Group: Read Less [-]

HMEDSCI 267 Bioethics, Medical Humanities, or Archival Thesis Working Group 3 - 4 Units

Terms offered: Not yet offered

The Bioethics, Medical Humanities TWG provides JMP students a supportive small group student-centered environment in which to discuss their research with other students engaged in Bioethics, Medical Humanities projects towards the goal of the successful completion of the required JMP MS.

Bioethics, Medical Humanities, or Archival Thesis Working Group: Read More [+]

Objectives Outcomes

Course Objectives:
To develop specific skills in Bioethics, Medical Humanities research design, planning and implementation, data collection, analysis, presentation and publication.
To give students a supportive environment in which to discuss their research with students and faculty who are engaged in similar research.
To give students the opportunity to provide peer advising to their classmates regarding their research projects.
To provide students with individual mentoring by TWG leaders during outside sessions planned between faculty and students.
To support students in developing skills in working with a mentor, developing a research design, obtaining IRB approval, collecting and analyzing data, managing a research project, presenting research to the community, and drafting a master's thesis and/or publication.

Rules & Requirements

Prerequisites: 2nd year students-HMS 261 completed with no incompletes
3rd year students-prior HMS 267 completed with no incompletes

Repeat rules: Course may be repeated a maximum of 4 times.

Hours & Format

Fall and/or spring: 15 weeks - 3-5 hours of seminar per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate

Grading: Letter grade.

Instructor: Halpern

Bioethics, Medical Humanities, or Archival Thesis Working Group: Read Less [-]
HMEDSCI 296 Special Study 1 - 10 Units
Terms offered: Spring 2017, Spring 2011, Spring 2007
Designed to permit qualified graduate students to pursue special study under the direction of a faculty member.
Special Study: Read More [+]

Rules & Requirements

Prerequisites: Graduate standing
Repeat rules: Course may be repeated for credit.

Hours & Format

Fall and/or spring: 15 weeks - 0-3 hours of independent study per week
Summer: 8 weeks - 0-3 hours of independent study per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Special Study: Read Less [-]

HMEDSCI 298 Directed Group Study 1 - 5 Units
Terms offered: Spring 2014, Spring 2013, Fall 2011
Group study for graduate students. Intensive examination of health-related topics.
Directed Group Study: Read More [+]

Rules & Requirements

Prerequisites: Graduate standing in Health and Medical Sciences Program or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 1-5 hours of independent study per week
Summer:
6 weeks - 2.5-12.5 hours of independent study per week
8 weeks - 1.5-7.5 hours of independent study per week
10 weeks - 1.5-4 hours of independent study per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate
Grading: Letter grade.
Independent Study and Research in Health and Medical Sciences: Read Less [-]

HMEDSCI 299 Independent Study and Research in Health and Medical Sciences 1 - 12 Units
Terms offered: Spring 2007, Fall 2006, Spring 2006
Independent study, research, and writing in an area related to program of study, sponsored by an approved faculty member and approved by program adviser.
Independent Study and Research in Health and Medical Sciences: Read More [+]

Rules & Requirements

Prerequisites: Graduate standing in HMS Program or consent of sponsoring HMS faculty member
Repeat rules: Course may be repeated for credit.

Hours & Format

Fall and/or spring: 15 weeks - 1-12 hours of independent study per week
Summer:
6 weeks - 2.5-30 hours of independent study per week
8 weeks - 1.5-22.5 hours of independent study per week

Additional Details

Subject/Course Level: Health and Medical Sciences/Graduate
Grading: The grading option will be decided by the instructor when the class is offered.

Directed Group Study: Read Less [-]