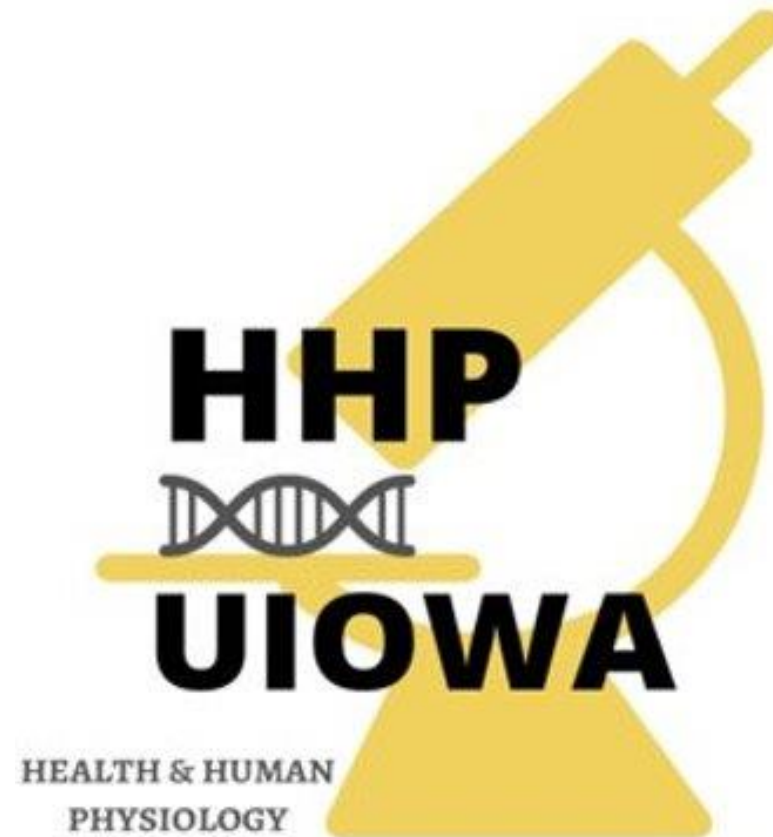

**COURSE
INFORMATION/
TIPS EVENT
FALL 2023**

HHP@UI



PREREQUISITE/CORE COURSES

PRINCIPLES OF CHEMISTRY I & II, 4 S.H. EACH

- PChem 1 (CHEM:1110): Prof. Adam Brummett (Professors change every semester)
- PChem 2 (CHEM:1120): Prof. Amy Strathman and Prof. David McCurdy (Professors change every semester)
- Principles of Chemistry counts towards the Natural, Quantitative, and Social Sciences (GenEd)
- 5 components (In-Person)
 - Lecture (Required)
 - Discussion sections (Required)
 - Case studies (Required)
 - Laboratories (Required)
 - Exams

Letter Grade	Percent
A range (A ⁻ , A, A ⁺)	85 – 100%
B range (B ⁻ , B, B ⁺)	75 – 84.9%
C range (C ⁻ , C, C ⁺)	65 – 74.9%
D range (D ⁻ , D, D ⁺)	55 – 64.9%
F range	<55%

PRINCIPLES OF CHEMISTRY I & II TIPS

- Tips

- Attend Professor office hours, TA office hours, and SI sessions

Understand the Professor's teaching style; examination format; do the practice problems & practice exams; attend lectures and discussions since exams are lecture and discussion heavy; go over exams and understand what you missed; REVIEW! Final is cumulative; making flashcards of formulas/concepts; forming study groups can be very helpful.

- **Ask Che Der if have any more questions: he's a tutor for PChem 1:)**
 - PRINCIPLES OF CHEMISTRY I: email CHEM-1110@UIowa.edu PRINCIPLES OF CHEMISTRY II: email CHEM-1120@UIowa.edu (Questions about lecture/ discussion content and homework)
 - PRINCIPLES OF CHEMISTRY I: email CHEM-1110lab@UIowa.edu PRINCIPLES OF CHEMISTRY II: email CHEM-1120lab@UIowa.edu (Questions about case studies/ lab content)
 - On campus resource (Tutor Iowa): <https://tutor.uiowa.edu/resources>
-

FOUNDATIONS OF BIO, 4 S.H.

- BIOL:1411 Prof: Amr El Zawily (Professors change every semester, similar content)
 - Not an HHP requirement if B.A., is required for B.S.
 - 3 components
 - Lecture, iClicker/TopHat (Required)
 - Dry and Wet Lab (In-person, Required)
- *Lab Quizzes
- *Lab Reports
- Exams (In-person)
 - divided in 2 point and 3 point application section

Letter grades	Percentage range
A range	100 - 84
B range	83.9 - 72
C range	71.9 - 58
D range	57.9 – 52
F	< 51.9

FOUNDATIONS OF BIO TIPS

- Tips

- Attend Professor office hours and SI sessions

Understand the Professor's teaching style; examination format; do practice exams and understand concepts/application, not just memorization; attend lectures and labs since exams are lecture and lab heavy; go over exams and understand what you missed; REVIEW! Final is cumulative; making flashcards of functional groups/concepts/formulas; forming study groups can be very helpful.

- Read the textbook and take notes!
 - Review reading quizzes!
 - Know the cycles/functional groups and drawing them out!
 - Understand the TopHat/iClicker questions (some questions are on the exam)
 - Read the lab manual before lab (lab quizzes)
-

DIVERSITY OF FORM AND FUNCTION (BIOL:1411), 4 S.H.

- Dr. Erin Irish and Brandon Waltz
 - Lecture (3 times a week) + lab (1 time a week)
 - Required for Human Physiology B.S. & for pre-health tracks (pre-med, dent, PT, PA, etc.)
 - Goes in depth with microorganisms (viruses, bacteria, prokaryotes, eukaryotes), plants, animal physiology, and ecology
 - Tips
 - Stay on top of lectures – don't let them stack up
 - Exams based more on lectures and not on labs
 - SI sessions (50 min review of weekly concepts) and/or office hours
 - Attend UIBio Review Sessions!!!
 - Review class Top Hat questions
-

BIOCHEMISTRY

- BMB:3110 Prof: Marc Wold, Anneke Sanders, Daniel Weeks, and Pamela Geyer
 - Not an HHP requirement, but counts towards HHP elective credit
 - Required for Pre-PA and Pre-Med/Dent students
 - Grades are exam based: 5 exams in total, worth 140 points (4 exams 17% & final 31%)
 - Lots of memorization, like cycles, structures, amino acids so review each chapter as it comes, EASY to fall behind!
 - Tips:
 - Attend all 3 lectures, rewatch lectures (recorded), and weekly zoom help sessions
 - Complete recommended practice problems in the book
 - Answer and understand Learning Objectives and Key Concepts for each chapter (emphasized on the exams)
 - Attend Help Sessions before exams and watch recorded Exam Reviews
-

CALCULUS FOR BIOLOGICAL SCIENCES, 4 S.H.

- Professors change every semester, however similar content is taught
 - A math class option for people who are BA or BS human physiology majors, as well as for those on a pre-health track
 - Starts with review of pre-calculus content before diving into calculus
 - It also takes place in some form every day, so you get enough exposure to the course content
 - Tips
 - **PRACTICE PROBLEMS!** Can't stress this one enough
 - Make flashcards when trying to memorize certain formulas and concepts
 - Attend SI, as these sessions provide lots of practice
 - Always do the provided review problems
 - Make use of the full discussion section time
 - Stay on top of homework and course content
-

COLLEGE PHYSICS I & II, 4 S.H. EACH

Professor Onel (Professors change every semester)

- Prerequisite(s): none! Required for Human Physiology B.S.

Class is bell-curved with 3 x 15-point midterm exams (15% each), 1 x 25-point cumulative final exam (25%), labs (15%), homework (15%) and pop quizzes (15%)

- Homework is not graded with Dr. Onel
 - Exams are multiple choice, where half of questions are conceptual and other half are problem-solving
 - Lab reports are completed and turned in at the end of lab class and you partner up to complete lab experiments (Once a week)
 - Tips
 - Pay close attention to demonstrations in class and go to office hours! Will help for concept questions
 - PRACTICE PROBLEMS! Do the homework problems assigned each week! They are not graded (for Onel at least) but are very helpful for understanding the topics and preparing for exams!
 - Sample exam is very similar to the actual exam!
 - Complete pre-lab before lab, and read lab manual to understand the lab procedural steps/formulas
 - Crash Course/Khan Academy is great for explaining concepts
-

HHP COURSES

HHP MAJORS

Just a reminder that the HHP department offers 6 majors/areas of study!



EXERCISE
SCIENCE (BS)

[VIEW PROGRAM](#)



HEALTH
PROMOTION (BS)

[VIEW PROGRAM](#)



HEALTH
STUDIES (BA)

[VIEW PROGRAM](#)



HUMAN
PHYSIOLOGY (BS)

[VIEW PROGRAM](#)



SPORT & RECREATION
MANAGEMENT (BS)

[VIEW PROGRAM](#)



THERAPEUTIC
RECREATION (BS)

[VIEW PROGRAM](#)

HHP CURRICULUM UPDATES

- Areas of Emphasis is added as an option for Human Physiology majors
 - Students majoring in human physiology may declare an emphasis area but are not required to do so to satisfy major requirements. Declaring an emphasis area does not require completion of elective coursework beyond that already required for the major. Major elective requirements can be met through emphasis area courses.
 - 3 tracks available
 - 1) Clinical Physiology Area
 - 2) Neuromuscular Physiology and Metabolism Area
 - 3) Research Area
-

Clinical Physiology Area

COURSE #	TITLE	HOURS
Four of these:		
HHP:3450	Immunology in Health and Disease	3
HHP:3700	Health Care Communications	1
HHP:4150	Clinical Exercise Physiology	3
HHP:4200	Metabolic Exercise Testing and Prescription	4
HHP:4250	Human Pathophysiology	3
HHP:4260	Respiratory Pathophysiology	3
HHP:4490	International Medicine: Experiential Learning	3

Neuromuscular Physiology and Metabolism Area

COURSE #	TITLE	HOURS
Four of these:		
HHP:4110	Advanced Human Anatomy Laboratory	4
HHP:4130	Skeletal Muscle Physiology	3
HHP:4300	Sensorimotor Neurophysiology	3
HHP:4410	Integrative Physiology of Exercise	3
HHP:4440	Physiology of Nutrition	3
HHP:4510	Energetics in Health and Disease	3

Research Area

COURSE #	TITLE	HOURS
All of these:		
HHP:3994	Undergraduate Research	3
HHP:4800	Research Methods and Ethics	3
HHP:4900	Honors Research	3

HUMAN PHYSIOLOGY MAJOR REQUIREMENTS UPDATE

Required Courses

- *NEW* Exploring Health and Human Physiology (1 sh)
- Anatomy for Human Physiology with Lab
- Human Physiology with Laboratory

One of these:

- Physical Activity and Health
- Cultural Competency and Health
- Nutrition and Health

- Students who are not freshman or not new to the major do not need to follow this new requirement but have the option to.
 - These required courses + 18 sh of HHP courses + 31 sh of cognate area courses is what is needed to graduate with this degree.
 - Reach out to Dr. Rogers for questions about curriculum!
-

EXPLORING HEALTH AND HUMAN PHYSIOLOGY (HHP:1050), 1 SH

- Instructors: Clayton Peterson or Aaron Schneider
 - Newly required course!
 - Delivery Mode: Hybrid, instructor determines if in person or online. Sub-sessions; Jan 16- Mar 5 and Mar 19 – April 30th
 - Introduction to different ways of thinking within the fields of physiology, health, exercise, and medicine
 - Exploration of quantitative reasoning, evidence-based reasoning, the scientific method, analytical reasoning and data literacy, ethical reasoning, importance of diversity and inclusion, and creative applications.
 - Sets you up for success in the HHP department!
-

PHYSICAL ACTIVITY & HEALTH (HHP:2200), 3 S.H.

- Instructor: Megan Lewey
- Prerequisite(s): none!
 - It's used to be a **required** class for B.S. and B.A. human physiology majors
 - Fulfills the values & culture gen ed requirement :)
- Very application-based with lots of memorization
- Tips
 - Use learning objectives to guide learning
 - Exams are right off the lectures and exam study guide
 - Attend SI sessions, they're super helpful
 - Make flashcards and repetition
 - Keep up with course assignments and lectures
 - Possibly helpful: sign up for this class during a semester when class load is not as heavy on memorization-intensive content





NUTRITION AND HEALTH (HHP:2310)

- Instructor: Katherine Mellen
- Delivery mode: in-person
- 3 credit hours, no prerequisites
- Components: 4 exams, two computer-based diet assignments, quizzes, and participation activities

Tips:

- Review class content as you learn it, don't wait to cram for the exams
 - Find ways to apply the content into your daily life
 - Flashcards and quizlets were very helpful!
-

<p>Forced Assimilation</p> <p>Rights and Privileges for Dominant Groups Only</p> <p>Attitudes, Policies, Programs, and Practices Within a System or Organization that are Destructive to a Cultural Group</p>	<p>Racism</p> <p>Maintenance of Stereotypes and Unfair Hiring Practices</p> <p>Inability of a System or Organization to Effectively Respond to the Needs of Diverse Groups</p>	<p>Differences are Ignored</p> <p>"Treat Everyone the Same" Philosophy</p> <p>Only Needs of the Dominant Group are Met</p>	<p>Explore Cultural Issues</p> <p>Committed</p> <p>Needs of Organization and Individuals are Assessed</p> <p>A Level of Awareness within Systems or Organizations of Their Strengths and Areas for Growth to Respond Effectively to Culturally and Linguistically Diverse Populations</p>	<p>Recognize Individual and Cultural Difference</p> <p>Seek Advice and Include Diverse Groups</p> <p>Hire Culturally Unbiased Staff</p> <p>Systems and Organizations That Exemplify Cultural Competence Demonstrate an Acceptance and Respect for Cultural Differences</p>	<p>Implement Changes to Improve Services Based upon Cultural Needs</p> <p>Continually Add to the Knowledge Base Within the Field of Cultural and Linguistic Competence</p> <p>Develop Organizational Philosophy and Practices</p> <p>Support and Mentor Other Organizations</p> <p>Actively Pursue Resource Development</p> <p>Advocate With and on</p>
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CULTURAL COMPETENCY AND HEALTH (HHP:2280)

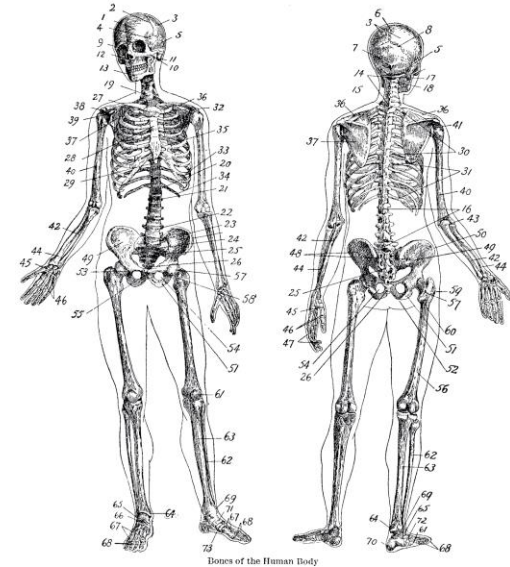
- Delivery mode: asynchronous online and in person option.
- 3 credit hours, no prerequisites
- Components: 8 quizzes, 2 application assignments, 8 online discussions, 1 online training course, 2 exams (online and proctored)

Tips

- There is a required textbook for this course, make sure to read it! The information is helpful and will reinforce what you learn in lecture
- Read the syllabus, there is important information for discussion posts and other assignments on there
- Watch the lecture and read the textbook early in the week to leave yourself plenty of time for the assignment in case you get busy

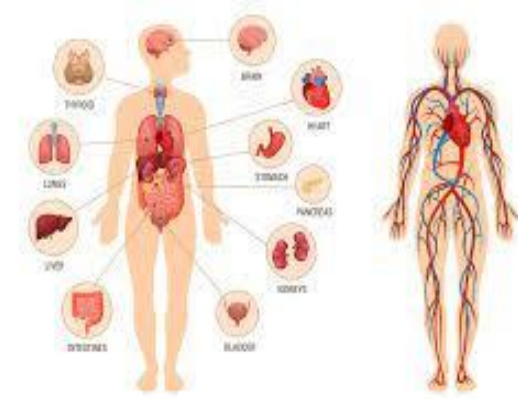
ANATOMY FOR HUMAN PHYSIOLOGY WITH LAB (HHP:3115), 5 S.H.

- Dr. Ray Fagenbaum
- Required for Human Physiology B.S. majors
- Prerequisites: Foundations of Biology (BIOL:1411)
- Delivery Mode: in person labs, in person and asynchronous lecture option
- Split up into two sections that combine for one final grade --> lecture (3 s.h.) and lab (2 s.h.)
- Covers all major systems of the body, focuses on normal structure of the human body. Memorization heavy.
- Tips
 - LECTURE: Pay close attention in lectures. You only need to know everything from lectures for the lecture exams, but everything from lecture is fair game.
 - LAB: utilize the entire class period, **go to office hours**, and draw things out. In this portion of the class, you'll have to identify where everything is in the body, so repetition is key!
 - BOTH: Follow the learning objectives provided
 - For the bones, memorize the terms/names first, then point them out on the model. (easier)



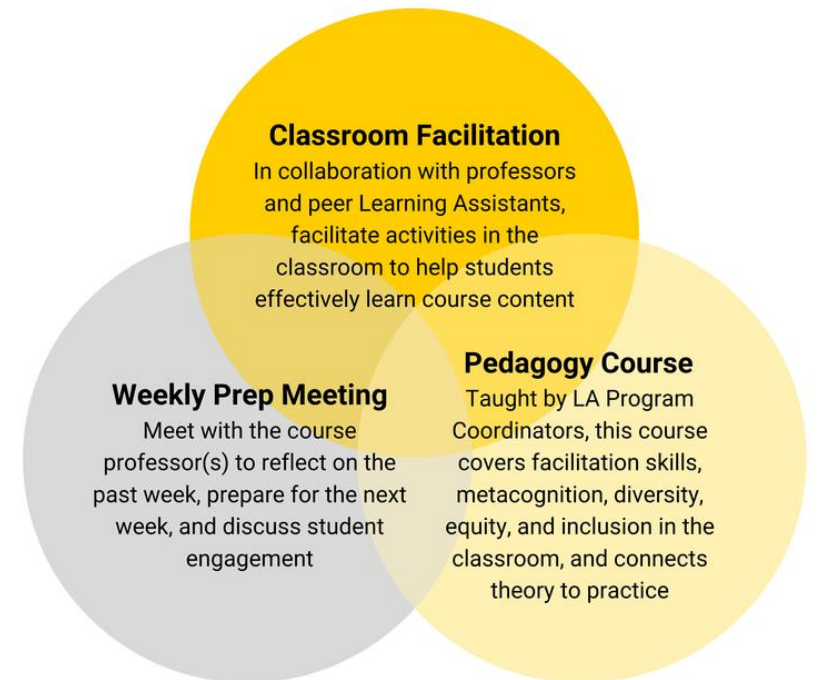
HUMAN PHYSIOLOGY WITH LAB (HHP:3500), 5 SH

- Dr. Jennifer Rogers
- Required for Human Physiology B.S. majors
- Delivery Mode: Hybrid (in person lab, in person class sessions, asynchronous recorded lectures)
- Prerequisites = (HHP:1300 or BIOL:1141 or BIOL:1411) and (CHEM:1070 or CHEM:1110)
- Mechanistic approach to understand organ system function and integrated function across systems as the basis for homeostatic regulation within the human body.
- Tips
 - Illustrate pathways!!!
 - Review content before lecture to gain familiarity
 - Take anatomy first
 - Guides understanding of physiology
- Lab
 - Software based, read lab manual before going in, helps ensure high quality data
 - Very fun- some clinical applications (practice manual BP, blood glucose checks and what they
 - Student presentations (2) - individual and group



HEALTH AND HUMAN PHYSIOLOGY TEACHING INTERNSHIP (HHP:4700), 3 SH

- Learning Assistant Program
- Classroom facilitation (usually 3 hrs/wk)
 - Human Physiology with Lab
 - Anatomy for Human Physiology
- Pedagogy course (1 S.H.)
 - Facilitation skills, metacognition, DEI, pedagogical theory
- Weekly prep meeting with professor, TAs
- Can be applied towards HHP elective credit, gen ed credit
 - Returning LAs may take for credit or stipend
- Honors students: **3 additional** experiential learning credits



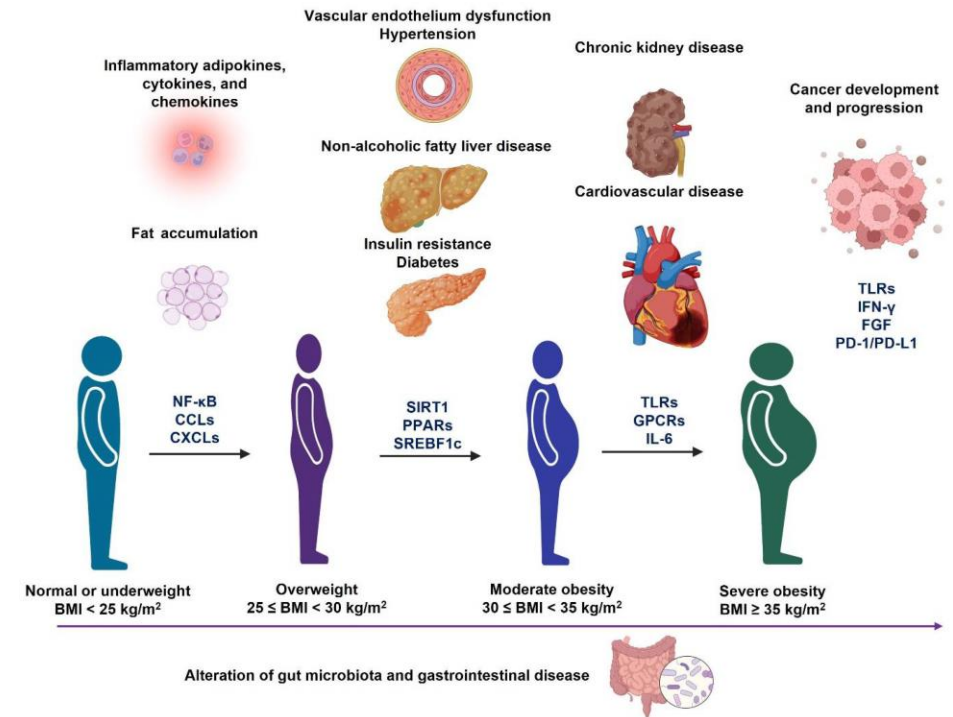
PHYSIOLOGY OF AGING (HHP:4470), 3 S.H.

- Dr. Shawn Flanagan
- Prerequisite = HHP:3500 or HHP:3550
- Spring Semester
- Calendar structure
 1. Off week
 2. 7 question in class-quiz
 3. Exam during lecture
- Flanagan lectures not recorded
- Geriatrics
- Organ systems as they age
 - Genetics, biochemical reactions, nature vs. nurture
 - Inherent study of diseases



ENERGETICS IN HEALTH AND DISEASE (HHP:4510), 3 S.H.

- Dr. Vitor Lira (main professor)
 - Dr. Erin Talbert, Chad Greuter (guest lectures)
- Prerequisites = HHP:3500 or HHP:3550
- Spring semester
- Biochemical pathways in health
 - Implications during obesity, cardiovascular disease, diabetes
 - Benefits of exercise
- 3 exams + final
 - Extra credit
- Similar to Biochemistry



HUMAN GROWTH AND MOTOR DEVELOPMENT (HHP:3300), 3 S.H.

- Dr. Kelli Taeger
 - Online in the fall. In-person or online option in the spring
- Useful for any pre-profession health track
- Focuses on biological maturation of body systems and physiological changes during different life stages
- Tips:
 - Focus on the patterns and trends presented
 - Attend all classes/watch all lectures (a lot of notes are fill in the blank)
 - Be able to describe the trend differences in males v. females












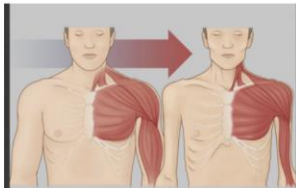

WRITING FOR HEALTH AND HUMAN PHYSIOLOGY (HHP:3900), 3 S.H.

- Andres Carlstein or Tatiana Schlote-Bonne
- Delivery Mode = in person
- Writing skills for professional, public, and scientific communication
- Gain high-yield skills for effective writing and revising through peer-reviews, assigned (short) readings, and instructor feedback
- Tips:
 - Save each draft as a new document so you can easily see the changes you've made (and keep these compiled in a folder for organization)
 - Get as much peer feedback as you can
 - Read the comments Andres leaves on submitted assignments to make changes for your final portfolio



UNDERGRADUATE INDEPENDENT STUDY (HHP:4500)

- 13 different professors available, depends on the HHP lab you work in
 - Different options in photo on the right
 - Can earn up to 3 semester hours for this course in a semester
 - Total of 9 S.H. can be obtained from this course during your time at UI
 - Need approval from research PI in order to register for this course
 - Individualized experience
 - Writing a manuscript
 - Making a poster for a presentation
 - Writing a paper
 - Completing other assignments
 - Overall depends on your PI/professor/mentor and what they've assigned you to
 - This experience is what you make of it!
 - Prioritize communication with peers and professor
-

			
BEHAVIORAL MEDICINE LABORATORY Lucas J. Carr, PhD LAB WEBSITE	LABORATORY OF INTEGRATIVE PATHOPHYSIOLOGY AND GENETICS Melissa Bates, PhD LAB WEBSITE	MOTOR CONTROL LABORATORY Warren Darling, PhD LAB WEBSITE	MUSCLE BIOLOGY & METABOLISM LABORATORY Vitor Lira, PhD LAB WEBSITE
			
TRANSLATIONAL VASCULAR PHYSIOLOGY LABORATORY Gary L. Pierce, PhD LAB WEBSITE	INTEGRATIVE NEUROPHYSIOLOGY LABORATORY Thorsten Rudroff, Ph.D. LABORATORY WEBSITE	OLDER ADULTS AND EXERCISE Ken Mobily, PhD LAB WEBSITE	PHYSICAL ACTIVITY AND WOMEN'S HEALTH LAB Kara M. Whitaker, PhD, MPH LAB WEBSITE
			
MICROVASCULAR PHYSIOLOGY LAB Anna Stanhewicz, PhD LAB WEBSITE	MUSCLE MOLECULAR PHYSIOLOGY LAB Erin Talbert, PhD LAB WEBSITE	INTEGRATIVE LABORATORY OF APPLIED PHYSIOLOGY AND LIFESTYLE MEDICINE Nathaniel D.M. Jenkins, PhD LAB WEBSITE	

HEALTH SERVICES (HHP:4040)

- Instructor: Gayle Walter
- Delivery mode: in-person or online
- 3 credit hours
- Prerequisites: HHP:2200 and HHP:2310
- Components: 3 exams, 1 documentary reflection, 3 application activities, online discussions, quizzes

Tips

- Go to every class! It may seem like you can skip and be fine, but Professor Walter will tell you extra material that will be on exams including what the short answer questions will be. You won't know this information if you skip
 - Utilize office hours!
 - Study as the class progresses, don't cram
-



SOCIAL DETERMINANTS OF HEALTH (HHP:4030)



- Professor: Megan Lewey
- Delivery mode: In-person and online option, 3 credit hours
- Prerequisites: HHP:2200 and HHP:2310
- Components: 2 exams, 6 quizzes, 3 papers, and 6 discussions
- How health is determined by policy, environments, economy, and social factors

Tips:

- Watch prerecorded lectures, take notes and review lecture slides, read textbook, and do discussions!
 - Class is very straight-forward, review terms and know applications!
-

HUMAN DEVELOPMENT THROUGH A LIFE SPAN (HHP:2130)



- Instructor: Kristina M. Gordan
- Delivery mode: Online, 3 credits
- Prerequisites: None, part of B.A curriculum
- Components: 5 online quizzes, 5 discussions, and 4-part developmental profile
- Overview of human development theories across a life span and the interactions between individuals and environments

Tips:

- Reread lecture notes and read textbook, quizzes are right off slides and are open note!
-

HUMAN ANATOMY (HHP:1100), 3 SH

- Instructor: Kelli Taeger
- Delivery Mode: In person lectures
- Approved Gen Ed = Natural Sciences without Lab
- Components: Quizzes over each chapter and 5 exams (final not cumulative)
- General human anatomy covering most systems of the body

HUMAN ANATOMY LABORATORY (HHP:1110), 1 SH

- Instructor: Kelli Taeger
- Delivery Mode: In person, once a week
- Approved Gen Ed = Natural Sciences Lab only

These courses are the anatomy options for non-human physiology majors!

Memorization is key with anatomy courses!

FUNDAMENTALS OF HUMAN PHYSIOLOGY (HHP:1300)

- Instructor: Aaron Schneider
- Delivery mode: Online or In-person
- Prerequisites: None, part of B.A. curriculum
- Components: Quizzes for each chapter covered and 3 Exams
- Introduction to function and regulation of the human body

Tips:

- Read textbook and take notes! Review quizzes since some questions repeat and pay attention to lecture and know pathways! Exams are multiple choice and requires memorization and application.
-

HUMAN PHYSIOLOGY LABORATORY (HHP:1310), 1 SH

- Instructor: Aaron Schneider
 - Delivery Mode: in person, once a week labs
 - Laboratory course illustrating principles of physiological principles through experimental measurements, practical assessments, and computer-based illustrations of human function.
 - Emphasis on human function!
 - No Prerequisites! Open to non-human physiology majors in HHP department!
-

ADVANCED HUMAN ANATOMY LABORATORY (HHP:4110)

- Instructor: Ray Fagenbaum, Sarah Lowenburg
- Delivery Mode: In person, Tuesdays and Thursdays, 5pm-7:45pm
- Although its only required twice a week, many students often come in 4 days a week.
- Requirement: Must have received a B- or higher in Anatomy for Human Physiology with Lab (cat dissection)
- Regional Dissection of the human body. This is a human cadaver lab, taught at a fast pace and difficult level.
- 4 sh

Tips

- Go to lab office hours!!
-