PET 5936 - Special Topics/Seminar
-Genetics and Human Performance-
18127 (Class) Summer 2021

Instructor
Basma Yacoubi, Ph.D
Office: 1A FLG
Office phone: 294-1749
Email: basma@ufl.edu
Office Hours: by appointment (Zoom link will be provided)
Preferred Method of Contact: Canvas messaging

About This Course

Meeting time/location
Canvas platform

Course Description:
PET 5936 - Special Topics/Seminars: Genetics and Human Performance

Course Goals:
This course has three goals: (1) to introduce the basic principles of genomics and genetics, and the underlying technologies relevant to quantitative genetics and genetic epidemiology research; (2) to present the evidence for the role of genetic variation in sports performance and risk of injury traits, and (3) to encourage the development of analytical skills that enable the students to evaluate and critically reflect on the quality of published research and its practical applications.

Course Objectives
- Explain and define basic genetics and genomics methods and terminology introduced in the course.
- Analyze and evaluate the quality of research which association genetic variation (small differences in DNA sequence among individuals) with sports performance and risk of injury traits.
- Compare and contrast different views on the future of genetics/genomics in sports especially regarding genetic testing, gene doping, and sex/gender differences.

Required Textbooks and Software

There are no required textbooks for this course. In addition to the lectures, research/review articles will be part of the reading assignments and will be provided (PDFs/links) as part of the course material.

University Policies

Personal conduct policy

Students are expected to review and adhere to the UF Netiquette guide for online courses http://teach.ufl.edu/wp- content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions.

Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the instructor.

Quiz and homework make-up policy

Quizzes and tests may not be submitted late. Students will be permitted to access the exams early upon receipt of evidence of a viable explanation for the need for such an accommodation.

A student experiencing an illness should visit the UF Student Health Care Center or their preferred healthcare provider to seek medical advice and obtain documentation. If you have an illness, family emergency or death, please contact the Dean of Students Office (www.dso.ufl.edu) and follow the DSO Care Team procedures for documentation and submission of a request for make-up assignment (https://care.dso.ufl.edu/instructor-notifications/). The DSO will contact the instructor. Do not provide any documentation to the instructor regarding illness or family emergency. This is your personal and protected information. The DSO is qualified to receive and verify the documents you provide. The instructor will follow the recommendations from the DSO.

Requirements for make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Accommodating students with disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting their Get Started page at https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

Course evaluations:
Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu or directly in CANVAS. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open.

Privacy
Possible help sessions may be audio visually recorded for attending students to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Getting Help

Health and wellness
- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575
- Counseling and Wellness Center: https://counseling.ufl.edu/, 352-392-1575
- Sexual Assault Recovery Services (SARS) - Student Health Care Center, 392-1161
- University Police Department, 392-1111 (or 9-1-1 for emergencies) http://www.police.ufl.edu/

Academic resources
- E-learning technical support, 352-392-4357 (select opti on 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. https://career.ufl.edu/
- Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/ Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/
- Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student- honor-code-student-conduct-code/ On-Line Students Complaints: http://distance.ufl.edu/student-complaint-process/

Inclusion, Diversity, Equity and Accessibility Resources
For suggestions or concerns related to IDEA, please reach out to any of the following:
- Dr. Leo Ferreira, APK IDEA Liaison, ferreira@hhp.ufl.edu
- Dr. Rachael Seidler, APK Graduate Coordinator, rachaelseidler@ufl.edu
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

Grading		
Evaluation Components (number of each)	Points Per Component	Weighted % of Total Grade
Homework (10)	200 (10 x 20)	50 %
Quizzes (10)	200 (10 x 20)	50%

Homework Assignments

There is one homework assignment each week on the Lectures and or on the research/review article readings when applicable. Questions are 1-5 short answer questions related to the content of the lecture or reading.

Homework assignments are due by the end of each module. You can work together and use any material available to you for this but the work you turn in should be your own, written in your own words.

Quizzes

A quiz pertaining to each week's material will include up to 20 questions (multiple choice) and will due by Sunday 11:59 pm of the week the material is covered and according to the course schedule. Quizzes are administered through the Honorlock proctoring service in Canvas and require students to use the Google Chrome browser to complete. These quizzes are to be completed within 1 hour, and must be completed in a single sitting while Honorlock records the session. Students will not be able to view their responses until the Monday following the due date of the quiz.

Honorlock System Requirements:

Quizzes will be proctored using HonorLock. You will not need to sign-up or schedule a testing time, nor will you need to create an account. To ensure your device is compliant with HonorLock, a series of pre-assessment checks must be performed before gaining access to the exam. Please do so in advance of the exam; we are unable to further accommodate for individual technological issues that may detract from your exam time.

Specifications necessary for HonorLock to work are listed below:
System compatibility and setup:
- *HonorLock is only supported through Google Chrome web browser on Mac, PC (no other mobile devices or tables are supported)*
- *Students must install the HonorLock Extension within Chrome*
- *HonorLock will not support Windows 8, Windows 8.1, Mac OSX 10.11 and Mac OSX 10.12. You can find the updated Minimum System Requirements and a system compatibility test at www.honorlock.com/support.*

Additional considerations using HonorLock for exams:
- *You will need to take the exam on a desktop computer or laptop with a webcam and microphone set up on your chosen device. This will not work on mobile devices or tablets, including iPads and smart phones.*

- *You need to make sure that the camera is facing YOU at all times – if the camera does not stay facing you or if you are out of frame, the exam will pause, preventing you from continuing even midway through. This will detract from your exam time.*
- *You need to open Canvas on the Google Chrome internet browser and to download the HonorLock Chrome Extension. Other internet browsers will not be compatible with HonorLock.*
- *Make sure you have a stable Internet connection wherever you are taking the exam (i.e. good Wi-Fi).*
- *A 360-degree scan of your testing room/environment will be required. If you are using a laptop, you will need to pick up your laptop and rotate it for the room scan, including your examination surface (i.e. desk, table), floor space, your lap, etc. The testing environment should be cleared of any clutter, no notes, or textbooks laying out. These could constitute a violation of the Honor Code (i.e. academic dishonesty).*
- *Make sure the room you are taking the exam in is well-lit and that you are by yourself. Rooms that are not bright enough may get flagged as "blurry" or "unclear". Avoid posters or photographs on the wall behind you; try to minimize noise (i.e. talking aloud). These will also flag your exam, which will be reviewed by a member of the instructor team for the course to confirm or refute any academic dishonesty.*
- *You must have a valid and clear photo identification (ID) card (Gator ID, driver's license, passport) to show at the start of the exam. Make sure the image is clear.*
- *Only one screen (I.e. cannot have multiple monitors) and one tab (i.e. the tab that is being used for the exam) in Chrome is allowed. HonorLock has an integrity algorithm that can detect search-engine use, so do not attempt to search for answers, even if it is on a secondary device.*
- *An HonorLock Practice Quiz will be set up under Quizzes in Canvas. Please go through this practice test well in-advance of taking the exam. This practice quiz allows you to go through all of the pre-assessment checks so you will know what to expect when taking the exam itself. Take the practice quiz on the device you intend to take the exam on, in the same environment (building, room, etc).*
- *Failure to meet the items above may result in a 0 grade. If you encounter any issues with the testing platform or the exam, you should immediately contact HonorLock for assistance. If this fails, you need to email your course instructor right away with specific details (i.e. screenshots of your chat conversation with HonorLock with time stamps) of what occurred so that they can assist you as quickly as possible.*

Grading scale

All course assignments are administered and graded within the Canvas course page, so students will have access to all grades as they submit assignments. Any assignment that requires the instructor to manually grade some aspect of it will be graded within one week of its due date. Final Grades will be rounded up. The table below provides a reference. More detailed information regarding current UF grading policies can be found here: https://catalog.ufl.edu/UGRD/academic-regulations/gradesgrading-policies/. Any requests for additional extra credit or special exceptions to these grading policies will be interpreted as an honor code violation (i.e. asking for preferential treatment) and will be handled accordingly.

Percent	Grade	Grade Points
90.0 - 100.0	A	4.00
87.0 - 89.9	A-	3.67
84.0 - 86.9	B+	3.33
81.0 – 83.9	B	3.00
78.0 - 80.9	B-	2.67
75.0 - 79.9	C+	2.33
72.0 – 74.9	C	2.00
69.0 - 71.9	C-	1.67
66.0 - 68.9	D+	1.33
63.0 - 65.9	D	1.00
60.0 - 62.9	D-	0.67
0 - 59.9	E	0.00

Success and study tips

Complete all assignment requirements. Each one is meant to engage you on regular basis with the material.

- Reviewing lectures more than once is recommended.

- Reading assigned research papers is integral to the learning process. Only going over the presentations is not enough to achieve the objectives of this course and earn a good grade.

Copyright statement

The materials used in this course are copyrighted. The content presented is the property of UF and may not be duplicated in any format without permission from the College of Health and Human Performance and UF, and may not be used for any commercial purposes.

Content includes but is not limited to syllabi, videos, slides, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy or distribute the course materials, unless permission is expressly granted. Students violating this policy may be subject to disciplinary action under the UF Conduct Code.

Disclaimer
This syllabus represents the objectives and tentative plans for the course. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, will be communicated clearly, are not unusual, and should be expected.

SEE COURSE SCHEDULE ON THE NEXT PAGE

Week	Dates	Quizzes (Q)and Homework (H) due dates	Modules (M)
1	5/11 - 5/14	Q1 due 5/16 H1 due 5/23	**M1-Overview: Genetics Basics**
2	5/17 - 5/21	Q2 due 5/23 H2 due 5/23	
3	5/24 - 5/28	Q3 due 5/30 H3 due 6/06	**M2-Overview: Performance traits and associated phenotypes**
4	5/31 - 6/04	Q4 due 6/06 H4 due 6/06	
5	6/07 - 6/11	Q5 due 6/13 H5 due by 07/04	**M3-Gene variants associated with sports performance**
6	6/14 - 6/18	Q6 due 07/04 H6 due 07/04	
	6/21		**M3 continued**
	6/22- 7/02		**No Class**
7	7/05- 7/09	Q7 due 07/11 H7 due 07/18	**M4-Gene variants associated with risk of injury**
8	7/12- 7/16	Q8 due 07/18 H8 due 07/18	
9	7/19- 7/23	Q9 due 07/25 H9 due 08/01	**M5-Ethnicity, Sex/Gender considerations in sports performance**
10	7/26- 7/30	Q10 due 08/01 H10 due 08/01	**M6-Genetic testing and genetic engineering in sports performance**
11	8/02- 8/06		**Class ends 08/06** **Grades due 08/11**
12	8/09- 8/13		