

**Viewing Translational Genomics through an Ethical, Legal/Policy, Social
Implications (ELSI) Lens**
HMN 760
Course Syllabus

Instructor:	Jennifer B McCormick	Term: Rotation 7
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		Hours: 1-3:30pm
		Class Location:
		Zoom or C1800
		Credits:
		Class Limit: 10

I. Welcome!

The goal of this course is to provide a forum for students to examine fundamental concepts in scholarship on the ethical, legal/policy, social implications of genetic and genomic science. These include how the field of genetics has evolved into the current era of translational genomics and personalized medicine, genetic discrimination and stigmatization, existing legal/regulatory frameworks, race and ethnicity, return of research results, return of incidental findings from genomic sequencing, individual's right to know/right not to know, and data ownership and sharing. These concepts will be explored in the context of specific uses of genomic science, for example, newborn screening, population screening, and use of DNA in law enforcement. Given the ever changing science, the topics explored each year may change.

II. Purpose of 4th year Selective

The purpose of Humanities 4th year selectives is to provide an opportunity for deeper learning, exploration, and reflection on the practice of medicine. The selectives aim to foster respect for the diverse values, beliefs and practices one encounters in the field of healthcare, while embodying a commitment to becoming an ethical, reflective, curious, humble, informed, and compassionate physician. This course is a capstone experience for medical students, integrating and/or deepening prior humanities learning. Within each course, diverse strategies are used to reflect critically on the application of humanistic principles to the practice of medicine.

III. Course Objectives

- 1) Describe how the field of genetics has evolved into current era of translational genomics and personalized medicine (KP2.1)
- 2) Explain basic ethical and social policy issues in translational genomic (KP2.1)
- 3) Describe how translational genomics has entered the clinic and public health domains and the associated challenges associated with this (KP2.1, CT10.1)

- 4) Analyze the ethical, legal/policy, social implications in vignettes and/or real-time cases (MH9.2)
- 5) Engage in civil and professional conversations about controversial topics, i.e. learn to agree to disagree (ICS4.3/IPC7.3, MH9.1)

Please refer to the entire list of [Medical Student Competencies and Subcompetencies Required for Graduation](#).

IV. Methods

This course involves approximately 16-20 hours of class time and activities, in addition to out of class assignments. The duration of the course is typically one month.

This course will include reading selected articles and book chapters, and in class discussion. This is a seminar format course and students are expected to actively engage in exploring together the topics and issues these topics raise. Guest speakers will engage with the class on a regular basis.

V. Grading

This is a Pass-Fail course. In order to pass you must meet expectations for attendance, participation, and classroom projects. This course is discussion intensive, and students will have a role in shaping the direction of these discussions. Students will be asked to prepare for each session by reading assigned materials and preparing questions for their classmates that stimulate inquiry above and beyond the assigned readings. Understandably students may need to miss a class session. They are responsible for informing the instructor prior to class and will be assigned a writing assignment based on readings used in class.

Participation

Class participation will be evaluated based on Interpersonal & Communication Skills (Demonstrates interpersonal and communication skills that result in the effective exchange of information & collaborations with others), Professionalism (Demonstrates an ongoing commitment to ethical and responsible behaviors, including respect, honesty, dependability, accountability, integrity, and compassion in interactions with patients, peers, faculty and colleagues), and Critical Thinking (Demonstrates the ability to apply higher-order cognitive skills (conceptualization, analysis, evaluation) and the disposition to be deliberate about thinking (being open-minded or intellectually honest) leading to action that is logical and appropriate.

Prior to the first meeting of the class, students will identify an article that has appeared within the last six months that highlights (discusses) genetics or genomics. This article could come from the lay media (i.e. podcast, online news source, news source other than online (e.g. Time Magazine), etc) or from the peer-review literature (commentary, research article, editorial). Students will write a 200-300 word summary to submit, and be prepared to summarize and discuss their assigned article with the rest of the class. The article and write-up will be submitted. Have 2-3 open ended questions related to the article that you would like to use as starting points for discussion.

Writing assignment

As a capstone to your medical education experience, this course requires students to complete a final project. They will prepare and submit a 750-1000 word response to directed questions on an area/topic within this course work. They will prepare and submit a 750-1000 word response to specific question. The response should use references to back your position (a minimum of 4). Students are expected to expound on their reasoning using various published sources (e.g. peer-reviewed, lay-press, podcasts). This assignment will be evaluated based on Clarity of Personal Position, Summarization and Integration of Outside Sources, Analysis and Interpretation to support Personal Position, Depth of Discussion (Elaboration), and Quality of Writing (including citing sources). Students must achieve 10/15 total points to pass.

Presentation and discussion facilitation

The last one to two sessions (depending on number enrolled) will be completely student led. Students will prepare material to present and facilitate discussion. Together with the instructor they will select a topic. They will prepare a presentation to provide background information and set the stage and integrate questions into the presentation that engage their classmates in discussion and further inquiry. Students will submit their presentation as well as a complete list of resources used (minimum of 4). Presentation and class facilitation will be evaluated based Summary and Integration of Relevant Outside Sources, Incorporating All Positions on the Topic, Interpretation and Analysis of Material Used to Prepare, Depth of Discussion, and Ability to Engage Classmates. Students must achieve 10/15 total points to pass. Combined presentation and discussion from each group is expected to be approximately 20-25 minutes.

XI. Course Schedule

TBD

PSU AND PENNSTATE HERSHEY COLLEGE OF MEDICINE POLICIES AND PROCEDURES

Culture of Respect in Education

View the policy on mistreatment, discrimination, harassment, and sexual harassment at <https://pennstatehealth.elucid.com/documents/view/2611/5303/> The student mistreatment reporting form may be accessed at <https://pennstatehershey.tfaforms.net/202>

Academic Integrity

Academic Integrity at Penn State is defined by Faculty Senate Policy 49-20 as “the pursuit of scholarly activity in an open, honest, and responsible manner.”

The University Code of Conduct states, “all students should act with personal integrity; respect other students’ dignity, rights, and property; and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation, or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.”

Academic dishonesty (including, but not limited to cheating, plagiarism, or falsification of information) will not be tolerated and can result in academic or disciplinary sanctions such as a failing grade (F) in the course.

Disability Statement

Penn State College of Medicine is committed to diversity and inclusion and, out of that commitment, supports the success of students with disabilities in all aspects of the University's educational programs. If you have a disability-related need for reasonable academic accommodation in this course, please contact the College of Medicine's disability services coordinator through the Office for Diversity, Equity and Inclusion at disabilityservices@pennstatehealth.psu.edu or (717) 531-3033. The disability services coordinator will share with you the documentation guidelines to be considered for academic accommodation (see <http://equity.psu.edu/student-disability-resources/guidelines>). If the documentation you provide supports the need for accommodation in accordance with the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), the disability services coordinator will provide you a letter identifying appropriate accommodation(s), and work directly with you and your instructors to implement approved accommodations in the classroom, laboratory, clinical, and/or examination settings.

For further information regarding Student Disability Resources at Penn State College of Medicine, please visit: <https://students.med.psu.edu/academics/student-disability-services/> or <http://equity.psu.edu/student-disability-resources>.

You can also access the disability statement at <https://pennstatehealth.ellucid.com/documents/view/1681>

Care of Medical Students in the Offices of Student Health and Student Mental Health and Counseling

There are designated non-faculty student health providers at Hershey in the Offices of Student Health and Student Mental Health and Counseling, and at University Park in the University Health Services who can provide health care services to students. These designated student health providers will have no involvement in the academic evaluation or promotion of any medical students. If a faculty member provides psychiatric/psychological counseling or other sensitive health services to medical students he/she will subsequently have no involvement in the academic evaluation or promotion of the students receiving those services.

Faculty members who serve on medical student admission or promotion committees must recuse themselves from any evaluation or promotion decisions about students for whom they have provided health services. Similarly, course directors must recuse themselves from any evaluation or promotion decisions about students for whom they have provided health services.

Should emergent or urgent conditions or consultations arise for which a student must see a provider who is not a designated student health provider, that provider must recuse him/herself from any subsequent involvement in the academic evaluation or promotion of that student.

SYLLABUS CHANGES

This syllabus will serve as a guide for the activities, policies, and procedures associated with this course. The course director(s) reserve the right to amend the syllabus as necessary and will provide notice of any changes.

Appendix A:

Humanities Small-Group and Selective Participation and Engagement Evaluation

Interpersonal Behavior and Professionalism:

- Consistently arrives on time
- Relates to others with compassion, humility, honesty, integrity, and respect
- Promotes positive group function and dynamics
- Takes a leadership role when appropriate

Communication Skills:

- Responds attentively to others' perspectives
- Expresses uncertainties and acknowledges gaps in one's own understanding
- Contributes to group discussion and activities by balancing talking and listening

Preparation for Class Sessions

- Demonstrates knowledge of large-group sessions (N/A if no large group sessions)
- References session materials in discussion, group activities, and/or writing assignments
- Arrives prepared to engage in discussion and session activities, with questions or comments about prework

Narrative Feedback

- How would you describe the student's strengths in the above areas? (For example, asks good questions of other students, enriches the conversation, deepens the group's understanding, draws out fellow students, demonstrates careful listening by referring to other students' comments, provides constructive feedback to colleagues, challenges group think, etc.)
- How would you describe the student's opportunities for growth in the above areas? (For example, needs to speak up more, could take a leadership role more often, might draw other students out by asking clarifying questions, could provide more constructive feedback to colleagues, etc.) If the student did not meet expectations in an area or areas, provide specific improvements the student must make in order to remediate.

Students must Always or Usually Meet Expectations in each category to meet expectations for the course as a whole.