Course Number and Title: GNUR 463 Cancer Genomics

Number of Credits, Meeting Schedule: 3 credits
online

Faculty: Patricia Friend PhD, APN-CNS, AOCN
Associate Professor

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Work Phone (708) 216-9553
Office Location: Maywood Room 4535
Office Hours: Tuesdays 3-5 PM and
Thursdays 2-4 PM

Prerequisites: basic oncology knowledge

Corequisites: None

Course Description:

This course uses a case-based learning process to examine the genetic basis for cancer disease, common cancer genetic syndromes, relative risk assessments, screening and surveillance guidelines, and the educational and management needs of clients and their families related to genetic predisposition to cancer. The emphasis is on the role of the advanced practice nurse.

Course Outcomes:

Upon completion of this course the student will be able to:

1) Describe the structure of DNA and differentiate among the various forms of genetic inheritance.
2) Describe the cancer burden in United States and how the science of genetics will assist with cancer control.
3) Explain oncogenesis, and function of oncogenes and tumor suppressor genes.
4) Obtain a genetics family history, and make a preliminary assessment of risk for genetic predisposition for cancer and the need for referral for further a genetic work-up.
5) Develop a basic level of skill in communicating information regarding cancer predisposition with sensitivity to the culture and the educational level of the clients and their families.
6) Analyze the cancer risk associated with common genetic cancer syndromes, the criteria for genetic screening and surveillance, and the genetic therapies available to date.
7) Analyze and apply current and future applications of genomics to cancer care.
Teaching methods:

This course is offered as an online course using a variety of synchronous and asynchronous tools. These include lecture and LIVE (synchronous) interactive classes, discussion forums, online exercises, and other assignments as outlined.

Students are expected to participate in all online assignments (e.g., readings, development of case studies, pedigrees and thoughtful dialogue in discussion groups).

Evaluation:

- Online assignments/student-led report of ELSI related to genetics/genomics/participation in discussion board = 20%
- Completion of pedigree assignments = 20%
- Online Examinations (2) = 60% (30% each)

Review of archived class lectures and attendance/participation in LIVE classes, completion of required readings, online exams, online learning activities/assignments, and pedigree construction are expected and will be tracked. Active participation in the discussion forums as well as the “live” interactive classes is expected as well. There are two examinations that will be posted online, a mid term and a final. These will consist of objective (multiple choice, T/F, etc.), and subjective (short answer) questions. There are also two graded pedigree assignments. Students will also have the opportunity to lead a threaded discussion on an ELSI issue related to genetics/genomics; this will include discussion of a selected article/literature.

Grading Scale:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tr>
<td>A</td>
<td>94-100</td>
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<tr>
<td>A-</td>
<td>92-93</td>
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<tr>
<td>B+</td>
<td>89-91</td>
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<tr>
<td>B</td>
<td>86-88</td>
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<tr>
<td>B-</td>
<td>84-85</td>
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<tr>
<td>C+</td>
<td>80-83</td>
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<td>C</td>
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<td>D+</td>
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<td>D</td>
<td>69-71</td>
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<tr>
<td>F</td>
<td>68 and below</td>
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Required course materials:

Additional readings will be assigned each week as indicated.

Calzone, K., Masny, A., & Jenkins, J. (2010). *Genetics and Genomics in Oncology Nursing Practice*. Oncology Nursing Society, Pittsburgh, PA.

Hello all and welcome to Spring 2014 semester! This is my absolute FAVORITE class to teach, and the best content! I hope you will find it as intriguing and fascinating as I! I will have the course available soon. The required text is from the Oncology Nursing Society, Calzone, K., Masny, A., & Jenkins, J. (2010). *Genetics and Genomics in Oncology Nursing Practice*. Oncology Nursing Society, Pittsburgh, PA. You can order this from the website, enter the code GEN14 at checkout and it will provide you with a 15% discount.
Recommended course materials:


Course Evaluation Expectation:

It is a professional expectation that all students participate in course evaluations to guide ongoing program improvement.

**ACADEMIC INTEGRITY**

*Policy on Academic Honesty*

Academic honesty is an expression of an ethic of interpersonal justice, responsibility and care applicable to Loyola University faculty, students and staff, which demands that the pursuit of knowledge in the university community be carried out with sincerity and integrity. Academic dishonesty is characterized by the failure to apply this ethic, i.e., any action whereby faculty, student or staff misrepresents the ownership of academic work submitted in his or her name.

Student failure to practice academic honesty will, depending upon the seriousness of the misconduct, result in a sanction ranging from the grade of "F" for the assignment to expulsion from the university.

Two specific areas where dishonesty is most common is cheating on tests and misrepresenting one's written work assignments as their own (plagiarism). Plagiarism is a serious form of violation of the standards of academic dishonesty. Plagiarism is the appropriation of ideas, language, work, or intellectual property of another, either by intent or by negligence, without sufficient public acknowledgement and appropriate citation that the material is not one's own. It is true that every thought probably has been influenced to some degree by the thoughts and actions of others. Such influences can be thought of as affecting the ways we see things and express all thoughts. Plagiarism, however, involves the taking and use of specific words and ideas of others without proper acknowledgement of the sources, and includes the following:

- Submitting as one's own material copied from a published source, such as print, internet, CD-ROM, audio, video, etc.
- Submitting as one's own another person's unpublished work or examination material
- Allowing another or paying another to write or research a paper for one's own benefit
- Purchasing, acquiring, and using for course credit a pre-written paper
The above list is in no way intended to be exhaustive. Students should be guided by the principle that it is of utmost importance to give proper recognition to all sources. To do so is both an act of personal, professional courtesy and of intellectual honesty. Any failure to do so, whether by intent or by neglect, whether by omission or commission, is an act of plagiarism. A more detailed description of this issue can be found at http://luc.edu/english/writing.shtml#source, Use and Misuse of Source Materials.

It has been faculty’s experience that examples of student plagiarism do occur, but usually in an unknowing way; the student was simply not aware of the proper way to cite sources and material. To that end students are strongly recommended to review the information in the above mentioned source. Even though you may not be writing a formal paper this semester, you will be submitting reaction papers, posting facts and comments on the discussion board, etc. Information on how to present factual information will be valuable throughout your graduate education and beyond.