

**PMCY 4000 – War on Cancer  
Course Syllabus – Spring Semester 2019**

**Course description:** This course will provide undergraduate students with a broad understanding of cancer, the treatment of malignancy in the U.S. and current challenges preventing eradication. This is a 15-week course for 3 credit hours taught by faculty in the Department of Pharmaceutical and Biomedical Sciences.

**Course Instructor:**

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**Location:** Class is held in Wilson Pharmacy room 337 from 9:30 - 10:45 am on Tuesdays and Thursdays. Some lectures may be pre-recorded and placed on eLC for students to access at their convenience. This is up to the discretion of the instructor. Some classes, such as April 2<sup>nd</sup> are in conflict with previous schedules and have already been marked on the syllabus.

**Terminal objectives**

At the conclusion of this course, students are expected to understand and describe the following:

1. Understand basic biology and principles that describe cancer
2. Cite an example of how a specific type of cancer is currently treated in the U.S.
3. Have a basic understanding of the history of disease and how treatments began
4. Describe differences between chemotherapy, immunotherapy and targeted small molecule inhibitors that are used to treat cancer
5. Be able to use government websites to locate cancer statistics and treatment guidelines

**Course purpose:** The objective of this course is to teach undergraduate students with knowledge about cancer as it relates to tumor biology and the rationale behind treating a patient with a specific type of disease. We will cover many aspects of malignant disease and students will leave the course with a greater understanding of why it's so challenging to achieve a cure for every subtype. This is an elective course, but may have special relevance for students with a personal connection to cancer or an interest in pursuing education related to public health, pharmacy or medical fields.

**Class material:** This class will use a variety of sources, including slides, websites, case studies, AccessPharmacy™ and research articles, which will be listed on eLC in the relevant class folder and/or discussed during class. The instructor may require or provide additional material at any time for other lectures without prior notice. Please note this is a rapidly expanding field with new therapeutics receiving FDA-approval on a regular basis. The course instructor therefore reserves the right to include additional sources as needed.

Date	Class	Topic
	<b>I.</b>	<b>Basic Principles of Cancer</b>
10-Jan	1	Course overview
15-Jan	2	Introduction to Cancer
17-Jan	3	Introduction to Cancer (continued)
22-Jan	4	Fundamentals of Malignancy
24-Jan	5	Understanding epidemiology of the disease
29-Jan	6	Known drivers of carcinogenesis
31-Jan	7	Aberrant tumor cell signaling
	<b>II.</b>	<b>Treatment of selected cancer types</b>
5-Feb	8	Basics on chemotherapy and anti-cancer therapeutics
7-Feb	9	Overview of cancer treatment in the U.S.
12-Feb	10	History of cancer treatment
14-Feb	11	History of cancer treatment (continued)
19-Feb	12	Treatment of cancer #1
21-Feb	13	Treatment of cancer #2
26-Feb	14	Treatment of cancer #3
28-Feb	15	Midterm (classes 2 - 13)
5-Mar	16	Results and review
7-Mar	17	Treatment of cancer #4
		Spring Break 2019: March 11 - 15
19-Mar	18	Treatment of cancer #5
21-Mar	19	Treatment of cancer #6
26-Mar	20	Treatment of cancer #7
	<b>III.</b>	<b>Other challenges to defeating cancer</b>
28-Mar	21	Costs of treating patients
2-Apr	22	NO CLASS
4-Apr	23	Cheating pharmacists and clinicians
9-Apr	24	Researchers behaving badly
11-Apr	25	Clinical trials
16-Apr	26	New approvals and innovative ideas
18-Apr	27	Social issues
23-Apr	28	Palliative care
25-Apr	29	Review Session
30-Apr	30	FINAL EXAM

**Required materials:** Computers are required for students because we will utilize websites in class, eLC for taking quizzes, and dropbox folders for turning in assignments. Slides and course material will also be available in folders posted to the class website on eLC. The instructor cannot be held responsible for technological failures as these resources are controlled by the Instructional Design and Technology Office, which can be reached at 706-542-1396. There are *no* make-up quizzes given for any reason, nor is the failure of technology considered a valid excuse.

**Grading:** Grades are based on the following: Midterm Exam (25%), Final Exam (35%), quizzes and other in-class assignments (30%) and out-of-class assignments or homework (10%).

**The grading scale is:**

A = 100-93

A- = 92-90

B+ = 89-88

B = 87-83

B- = 82-80

C+ = 79-78

C = 77-73

C- = 72-70

D = 69-59

F = 58-0

In-class assignments may be completed in small groups or individually, as will be assigned by the instructor. Active participation is up to the discretion of the instructor. It includes, but is not limited to, active input during all group presentations and being in attendance during class. Groups might be asked their anonymous input to score members on participation. According to the UGA Academic Honesty policy, all group members must participate equally. An example of prohibited conduct is, "Submitting a group assignment, or allowing that assignment to be submitted, representing that the project is the work of all of the members of the group when less than all of the group members assisted substantially in its preparation." The instructor should be notified of issues.

Exams are based on the lecture material (slides, class handouts, eLC material and any information discussed or multi-media material presented during class), material provided in the course and the application of this material.

Quizzes may be unannounced and given in-class at the discretion of the instructor throughout the semester. Internet access and eLC will be required to complete these in-class quizzes. There is no make-up for missed quizzes. The instructor cannot be held responsible for students who are 'present' during class, but leave the room.

Procedure if a graded item is to be missed due to an **emergency** (recognized by the University or College of Pharmacy as a situation that would be permissible as excused based on the emergency nature of the situation, i.e. death in the family) the student must:

1. Contact the course coordinator as early as possible PRIOR to the missed item. In the rare case of an extreme occurrence in the student's life, sometimes this contact filters to the instructors through the Dean's office, immediately after it is reported.
2. Provide written validation of the reason for missing the item by the specified date. Legitimate documentation supporting the reason for the absence will be required.

3. Emergency absences will be handled on an individual basis at the discretion of the instructors. If allowed, take the make-up component at a time established by the instructor.
4. If a student is scheduled to participate or present at a professional meeting the student must alert the course coordinators in writing at least 30 days prior to the meeting in order to be considered for a make-up. Approval of absences to attend meetings, fundraisers, or other social or professional events has not been granted previously. Generally, these events are handled or coordinated through the administration and strict policies apply.
5. Exams will not be administered prior to their date, with the *very* rare exception of a scheduled hospitalization for surgery involving the student or birth of a child.
6. Students who missed an exam for an *approved* excuse could be given an oral and/or written make-up exam at the instructor's discretion.
7. Failure to provide adequate written notice of an approved or an excused absence will result in a zero for that graded item at the discretion of the instructor and cannot be replaced by the corresponding grade in the final exam because there is no required final.

**There is no make-up final exam given. Any absence from the final will result in an automatic grade of Incomplete for the course.** There is no make-up for presentations or quizzes.

**Professionalism and courtesies:** Students are expected to behave appropriately during class. Students who do not display competence in the professional behaviors and attitudes are subject to informal and/or formal corrective action. For example, students should silence cell phones during class so that they are not a distraction. Students should come to class on time and be seated to not impede the learning process of others.

**Internet policy:** It is considered unprofessional and a distraction to surf the Internet for entertainment, social networking, gaming, completing other assignments or use technology for non-academic activities during the class period. Real examples of students misusing technology during previous classes include: posting comments on Facebook, engaging in online games (poker, World of Warcraft, baseball, etc.), viewing sporting events (ESPN highlights), shopping for boots, viewing haunted house videos on YouTube, browsing photos, booking vacations, shopping for Amy Winehouse paraphernalia, browsing magazines like *Popular Mechanic*, finishing homework for other courses, excessive use of personal email, etc.

Therefore, students are not allowed to use laptops or any other portable electronic device during lecture, except for academic use *directly* related to the class (e.g. taking notes, eLC, etc.). All other websites present a distraction to other students and are not allowed. Offenders of this policy will be reported to the administration and subject to professionalism violations or grade impact. The instructor reserves the right to ban use of all portable electronic devices at any time during the course. Please use technology responsibly.

**Attendance:** Routine attendance to class is necessary and mandatory. Studies indicate that students who regularly attend class perform significantly better than their counterparts that do not. In the event that a student does not attend class, the University of Georgia Office of the Registrar authorizes instructors to drop or withdraw a student from a course because of excessive absences. Excessive absence in this course is defined as missing  $\geq 13.5\%$  of classes. Once that period is achieved, the instructor has the authority to drop or withdraw the student.

**Academic Integrity and Honesty:** The University of Georgia has a University Honor Code and Academic Honesty Policy. All students are responsible for making themselves familiar with these codes and policies and for maintaining the highest standards of honesty and integrity in every phase of their academic careers. The penalties for academic dishonesty are severe and ignorance is not an acceptable defense. All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work. The link is: <http://www.uga.edu/honesty/index.html> . Any student who has concerns or questions regarding matters of academic integrity is urged to bring them to the attention of the instructor.

**Disabilities:** Students with disabilities requiring alternative accommodations for class or examinations should contact the instructors at the beginning of the semester. Accommodations cannot necessarily be made on the day of the first quiz. Please let the instructor know about your disability as soon as the semester starts, which is usually in the form of an email through the University Disabilities Office.

**NOTE:** The course syllabus is a general plan for the course; deviations (e.g., course content, examination schedule, grading, etc.,) announced to the class by the instructor may be necessary. All students are responsible for changes announced in class even if they are NOT present.