

Medical Cell Biology - GMS 5057 - Syllabus

I. Course Information

Credit hours: Three (3)

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Canvas: <https://ufl.instructure.com/courses/377554>

II. Course Overview

This course focuses on the structure and function of human cells (human cell biology) in the context of human health and disease. Lectures focus on normal functions at the molecular and cellular level. Topics include molecules, organelles, cells, and cell interactions, regulation, signaling, and death. Examples of well-known disease mechanisms are discussed. Normal cell functions are contrasted to functional abnormalities characteristic of the underlying pathophysiology, which are correlated with clinical manifestations where appropriate. Therapeutic approaches and relationships to underlying disease mechanisms are included to illustrate how interventions at the cell biological level restore normal or near normal function and ameliorate clinical symptoms and improve patient prognosis.

III. Learning Objectives

The overarching learning objectives for this course are:

1. Describe the normal structure and function of human cells and their specializations and contrast these normal aspects to abnormalities characteristic of specific human disease states.
2. Explain the normal formation of the extracellular matrix in different human tissues and contrast normal aspects to abnormalities characteristic of specific human disorders or diseases.
3. Discuss the normal cell and matrix changes that occur during growth, development, and aging and compare normal changes to perturbations observed in syndromes that do not cause frank disease but cause changes in normal functions that give rise to clinical manifestations.

IV. Course Format

This course is offered online and timely viewing of course content is the student's responsibility. Lectures are approximately 50 minutes long. The course web page provides links to view lecture videos and download lecture PDF files. During the fall and spring terms, it is suggested that at least 3 lectures be viewed per week. During the summer term, it is suggested that at least 4 lectures be view per week. Videos and PDFs will be available throughout the term. However, exams are only available for a specific time frame on a modular schedule (see below).

V. Textbooks

Required text: *Molecular Biology of the Cell* by Alberts et al., 6th Edition, 2015

VI. Assessments

Quizzes

Fifteen practice quizzes are given, consist of 9 questions each, and do not count towards the final grade. The format of all quiz questions is multiple choice, single best answer.

Exams

There are five exams that each consist of 45 questions and students have up to 90 minutes to complete each exam. The format of all exam questions is multiple choice, single best answer. Exams will be available from 8:00 AM Friday through 8:00 PM Sunday on the scheduled exam date. Timely completion of exams is the responsibility of the student.

Exam Proctoring

All exams require proctoring by ProctorU. Exams must be taken using a computer that meets ProctorU technical requirements, including a web cam and microphone. Arrangement for proctoring by ProctorU is the responsibility of the student. Making an appointment with ProctorU at least two weeks in advance to the exam date is recommended. Information about ProctorU is available at: <https://www.proctoru.com/proctoru-live-resource-center>

Make-up Assessments

Make-up exams will be given to students whose absence is excused by the course director. Students must adhere to UF Academic Honesty Policies and not give or accept unauthorized aid for make-up exams. Requests for make-up exams must be sent to the course director via email with information about the reason for the absence. Absences from exams are not automatically excused. Students with unexcused absences will not take make-up exams.

Discrepancies

Students may uncover discrepancies between information in (1) lecture, (2) required textbooks, (3) other textbooks, (4) online content (e.g., Wikipedia), or (5) personal communications. In these instances, students are encouraged to communicate discrepancies to course co-directors and faculty. However, for the purposes of examinations and grading, discrepancies in course and exam content will be resolved by the course co-directors.

VII. Grades

Final grades are based on cumulative percentage scores from the 5 exams (225 points). Quiz scores do not count towards the final grade; practice quizzes are for review purposes only. All exam questions are worth 1 point (i.e., all exam questions have equal weight). Final grades will be based on the following ranges of cumulative percentage scores, after rounding up:

<u>Grade</u>	<u>% Range</u>	<u>Grade</u>	<u>% Range</u>	<u>Grade</u>	<u>% Range</u>
A	93 - 100	B-	80 - 82.99	D+	67 - 69.99
A-	90 - 92.99	C+	77 - 79.99	D	63 - 66.99
B+	87 - 89.99	C	73 - 76.99	D-	60 - 62.99
B	83 - 86.99	C-	70 - 72.99	E	<60

VIII. Policies

Academic Honesty

The Honor Code (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>) specifies behaviors that are in violation of academic honesty and possible sanctions. According to UF policies, students are required to report to the course director any situation that facilitates academic misconduct. Please send any questions to the course director.

UF students are bound by the Honor Pledge, which states:

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

Accommodations

Students with disabilities requesting accommodations must register with the Disability Resource Center (352-392-8565, <https://disability.ufl.edu/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the course director. Students should follow this procedure as early as possible in the semester.

Attendance

Requirements for class attendance and make-up work for this course are consistent with UF policies that are available online (<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>).

Evaluations

Students are expected to provide feedback on instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two to three weeks of the semester. Students will be given specific times when they are open. Summary results are available to students at <https://evaluations.ufl.edu/results>.

Health and Wellness

If you or a friend are in distress, please contact umatter@ufl.edu or 352-394-2273. Resources are available (<https://umatter.ufl.edu/>). Counseling is available (<https://counseling.ufl.edu/>). The UF Police Department can be reached at 392-1111 or 9-1-1 for emergencies.

Grading

UF policies are at <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.