Spring 2014 Syllabus: EMA 6938, Section 075D The Science of Cell Material Interactions

- Course Description: (3 credit hours) This course will emphasizes the biological aspects of the various
 processes known to exist as cells interact with biomaterials. The interactions of materials with biological
 systems will be examined from the molecular (e.g., protein), cellular, tissue and systemic (whole body)
 perspective.
- 2. Pre-requisites and Co-requisites: Bachelor's degree or equivalent
- 3. Course Objectives:
 - a. Understand in vivo behavior of different classes of natural and synthetic biomaterials
 - b. Examine the biological response to materials including biocompatibility and hemocompatibility as well as biological failure processes of implantable biomaterials/devices
 - c. Understand how materials properties are used to control cell processes (ie.cell-instructive Biomaterials)
 - d. Understand the impact of various material properties on cellular processes
- 4. Contribution of course to meeting the professional component-

(ABET only – undergraduate courses)

5. Relationship of course to program outcomes: skills students will develop in this course -

(ABET only – undergraduate courses)

- 6. Instructor: Dr. Josephine Allen
 - a. Office location: Rhines Hall, room 157
 - b. Telephone: 352-846-3328
 - c. E-mail address: jallen@mse.ufl.edu
 - d. Class Web site: The course website can be found on the Sakai system http://iss.at.ufl.edu, there you can find the course syllabus, lecture notes, grades, and announcements. Check it frequently!
 - e. Office hours- Dr. Allen will hold office hours on Tuesday after class (3:00-4:00pm) and by appointment

Please only communicate with me through your official UF e-mail account. The UF e-mail system is secure, ensuring your privacy as a UF student.

- 7. Teaching Assistant: N/A
- 8. Meeting Times and Schedule- We will meet for three 50 minute class periods per week
 - a. Tuesday- period 7, 1:55-2:45pm
 - b. Thursday- periods 7 and 8, 1:55-2:45pm and 3:00-3:50pm
- 9. Meeting Location Tuesday FLG 280 and Thursday MAEB 229
- 10. Material and Supply Fees: N/A
- 11. Textbooks and Software Required
 - a. There is no required textbook
 - b. Course notes will be provided via Sakai (http://lss.at.ufl.edu)
 - c. Primary literature reading will be provided
- 12. Recommended Reading (See 11 above)
- 13. Course Outline to be provided
- 14. Attendance and Expectations- Lecture attendance is highly recommended.

15. Grading:

20%-Research Paper

20%-Proposal 15%-Presentation 20%-HW Assignments

10%-Quizzes

15%-Participation/Discussion leader

16. Grading Scale:

≥80 Percentage ≥92 ≥88 ≥84 ≥76 ≥72 ≥68 ≥65 ≥62 ≥59 ≥56 < 56 Letter Grade A-B+ Α В B-C+ С C-D+ D D٠ Е

"Graduate students need an overall GPA of 3.00 truncated and a 3.00 truncated GPA in their major (and in the minor, if a minor is declared) at graduation." For more information on grades and grading policies, please visit: http://gradcatalog.ufl.edu/content.php?catoid=4&navoid=907#grades

- 17. Requirements for class attendance and make-up exams, assignments, and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx
- 18. Honesty Policy 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 obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Note that failure to comply with this commitment will result in disciplinary action compliant with the UF Student Honor Code Procedures. See http://www.dso.ufl.edu/sccr/procedures/honorcode.php

- Accommodation for Students with Disabilities Students Requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.
- 20. <u>UF Counseling Services</u> Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx, counseling services and mental health services.

Career Resource Center, Reitz Union, 392-1601, career and job search services.

University Police Department 392-1111

- 21. <u>Software Use</u> All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.
- 22. 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. 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. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results. "