

1. Catalog Description – This is a 3-credit introductory course for a student in the engineering discipline to develop their engineering career in a biomolecular engineering-related field. The contents of the course emphasize the link between biology and chemical engineering and the interface between them.
2. Pre-requisites and Co-requisites – ABE 2062 or equivalent course.
3. Course Objectives – This course aims to introduce basic biomolecular engineering contents to students to help them to identify whether this is a suitable field for them to develop their career path. Students enrolled to this class expect to learn the process and characterization of biomolecular engineering.
4. Contribution of course to meeting the professional component – This is an era that an engineer can greatly apply their solid engineering training to much broader area, such as biomedical field. The course aims to give students an opportunity to expand their discipline to bio-X, such as biomedical engineering, fields.
5. Relationship of course to program outcomes (B.S. program objectives) – When finishing this course, the students shall attain **a)** to instill technical competence in mathematics, science, and/or engineering; **c)** to develop an ability to apply knowledge to practice; **d)** to instill an ability to design a component, unit, or process that meets performance specifications; **e)** to develop an ability to design and to conduct experiments, as well as to analyze and interpret the data; **f)** to instill an ability to use the techniques, skills, and modern engineering tools necessary for chemical engineering practice; **g)** to develop communication skills; and **j)** to provide opportunities to obtain the broad background, including contemporary issues, necessary to understand the impact of engineering solutions in a global and societal context.
6. Instructor: Yiider Tseng, PhD, Associate Professor of Chemical Engineering
 - a. Office location: 223 CHE (Chemical Engineering Building)
 - b. Telephone No.: (352) 392-0862
 - c. E-mail address: ytseng@ufl.edu
 - d. Web site: <http://www.che.ufl.edu/faculty/tseng/index.html>
 - e. Office hours: WR Period 7 (1:55 pm – 2:45 pm), or special appointment by email
7. Teaching Assistant: Ju Hee Choi, PhD graduate student of Chemical Engineering
 - a. Office location: 125 Larsen Hall
 - b. E-mail address: juheechoi@ufl.edu
 - c. Office hours: MF 11:00 am – 12:00 am.
8. Meeting Times – This class will meet two times a week.
9. Class schedule – T: Period 5 (11:45-12:35) and R: Period 4 (10:40 - 11:30) and 5.
10. Meeting Location – T: FAB 0103 and R: LAR 0310.
11. Material and Supply Fees – None.
12. Textbooks and Software Required – None.

Students need to study the materials offered by the class and are encouraged to actively acquire more information from the Internet for related materials taught in the classes.
13. Reference:
 - a. Title: *Campbell Biology* (Pearson/Benjamin Cummings Publisher)
 - b. Authors: Reece, Urry, Cain, Wasserman, Minorsky and Jackson

- c. Publication date and edition: 2011 as 9th Edition
 - d. ISBN number: ISBN-13: 9780321558237 or ISBN-10: 0321558235
14. Course Contents: This course covers four sections, which won't be distributed evenly.
- Section 0 Course introduction
 - Section 1 Biomolecules
 - Section 2 Biomolecular Manufacture
 - Section 3 Biomolecular Purification
 - Section 4 Biomolecular Characterization and Optimization
15. Attendance and Expectations – Students are expected to attend the classes. Absence from the lectures will lead to poor performance in exams. A student is required to report a special event that causes his/her absence prior the class by email.
16. Grading – Students shall form a team with no more than 4 members to present a project. The project will be chosen from the current research of major research institute and related to biomolecular engineering. The presentation will be 30 minutes itself and extra question section. I will provide a Rubric Grading sheet for the student to grade. The presentation can start from February. After the presentation, each student needs to turn in a report within one week and the report (same topic) need to be written individually. Students in the same group will have the same presentation score but individual report score. Besides, three exams will be held on Jan. 29, Feb. 26 and Apr. 2. Each exam score will be individually modified by the distribution curve.
- Presentation 20%.
 - Individual Report 20%
 - Three exams: 20% each.
17. Grading Scale – The student's final score determines his/her final grade. A: 90, A-: 87, B+: 85, B: 80, B-: 77, C+: 75, C: 70, C-: 67, below: D.
- “A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>
18. 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>
19. Honesty Policy – All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.
20. 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.
21. UF Counseling Services –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, psychological and psychiatric services.

- Career Resource Center, Reitz Union, 392-1601, career and job search services.
22. Software Use – 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.