MASTER SYLLABUS

COURSE: CHM **204-01 - ORGANIC CHEMISTRY II - 4 credits - Hybrid Course**

INSTRUCTOR: Nancy Thorpe, PhD

COURSE DESCRIPTION:
This course is a continuation of CHM 203. The course includes aromatic compounds, alcohols, aldehydes, ketones, carboxylic acids and derivatives, amines, biomolecules which include lipids, proteins, and carbohydrates. Laboratory fee required. Prerequisite: CHM 203. Semester offered: Spring. Credits: 4.

TEXTBOOK:

1. ***Organic Chemistry, 5th ed.,*** by Janice G. Smith. McGraw-Hill Education. 2017. (ISBN: 978-0-07-802155-8); with Connect access code.
2. ***Organic Chemistry As A Second Language: 1st and 2nd Semester Topics. 4th ed.***, by David Klein. John Wiley & Sons, Inc. 2017. (ISBN: 978-1-119-11066-8 and 978-1-119-11065-1).
3. ***Multiscale Operational Organic Chemistry: A Problem-Solving Approach to the Laboratory Course. 2nd ed.***, ed. John W. Lehman. Pearson Prentice Hall. 2009. (ISBN: 0-13-241375-2).
4. ***Organic Chemistry Laboratory Notebook***. Brooks/Cole 1998. (ISBN: 0-875-40252-6).
5. **McGraw Hill Connect Homework Access Code** for textbook listed above (purchase separately of bundled with textbook.)
6. Students will also need: scientific calculator (not graphing calculator) and safety goggles.

STUDENT LEARNING OUTCOMES:

At the completion of this course, students should be able to:

1. Apply both quantitative and qualitative thinking processes and reasoning skills to core content for organic chemistry.
2. Communicate organic chemistry concepts in writing and by use of appropriate technology and proper terminology and nomenclature to both scientists and non-scientists (e.g. maintain a laboratory notebook).
3. Collect, analyze, and evaluate empirical data to substantiate chemical concepts.
4. Apply course content to environmental and health-related issues (e.g., pollution, global warming, toxicology, pharmacology, environmental health).

TOTAL HOURS OF COURSE WORK EXPECTED:
In order to meet the minimum requirements for a 4 credit class, the number of class/study hours expected of the student is multiplied by 3. The total work required to earn four college credits – 150 hours/semester, or 12 hours/week during a 15 week semester (includes class time plus additional homework/study time outside of class).

Please be aware that certain courses, or certain students, may require more than *minimum* hours of work per credit each week in order to be successful in that course.

Credit Hour to Clock Hour Calculation (for 4 credit course)
Direct Faculty Instruction: One hour Instruction/week/credit
(50 min * 15 weeks) ÷ 60 min/h = 12.5 h/credit * 4 credits = 50 hours

Student work out of classroom: (Two hours per credit per semester**)**
(2*50 min * 15 weeks) ÷ 60 min/h = 25 h/credit * 4 credits = 100 hours

Hybrid Class: 1 hour recitation time and 3 hour lab time each week = total 50 hours in-class time.

	Direct faculty contact (in-class)	Student Work outside of class
Viewing online lectures/ reading assignments		20 h
3 Lecture Exams and Comprehensive Final Exam in testing center (4 h*2) Prep time LSC/Home (6 h*4 exams)		8 h (taking exams) 24 h (exam prep)
6 – 8 quizzes		6- 8 h (quiz prep)
Homework Assignments (online and written)		20 h
Lab time/recitation time	50.0 h	
Lab Preparation Lab Practical Prep Lab Report Completion	1 h/lab*10 labs 2 h study time*2 2 h/lab* 10 labs	10 h 4 h 20 h
Total “lecture” and lab	50.0 h	112 - 114 h+
TOTAL	**162-164+ h (exceeds minimum of 150 h for 4 credits)**	