

SYLLABUS

CHEM 2042 General Organic Chemistry II

SUMMER 2019 P50

Instructor: Dr. Nathaniel Soboyejo

Section # and CRN: P50-1930-32111

Office Location: E.E.O'Banion Science Building Rm 222

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Office Hours: M-R: 1.45-2.15pm or by appointment

Mode of Instruction: Face to Face

Course Location: ROOM 214 E.E.O'Banion Science Building

Class Days & Times: M-R: 2.00.-5.40pm

Catalog Description:

General Organic Chemistry Laboratory II. (0-4) Credit 2 semester hours. This is a

continuation of CHEM 2032.

Prerequisites: CHEM 2043

Co-requisites:

Required Texts: Brooks / Cole Organic Chemistry Laboratory, 2032-2042

Recommended Organic Chemistry 9th edition by John McMurry

Texts: Organic Chemistry Third Edition By David Klein

Student Learning Outcomes: Students will learn how to perform basic chemical synthesis and characterization of products by using IR spectroscopy, NMR spectroscopy, UV/Visible spectroscopy and Mass spectrometry. Students will learn theoretical and chemical principles that are supported by experimental results of organic reactions including elimination and substitution. Students will learn chromatography methods such as thin layer chromatography and gas chromatography

| | Upon successful completion of this course, students will be able to: | Program Learning Outcome # Alignment | Core Curriculum Outcome Alignment |
|---|--|---|---|
| 1 | Learn how to dehydrate cyclohexanol | | |
| 2 | Demonstrate an understanding of Sn1 and Sn2 reactions | | |
| 3 | Learn how to nitrate acetanilide or methyl benzoate | | |
| 4 | Separate a mixture of biphenyl, benzhydrol and benzophenone by thin layer chromatography | | |
| 5 | Identify an unknown compound by IR spectroscopy | | |
| 6 | Use nuclear magnetic resonance to identify an unknown compound | | |
| 7 | | | |

Major Course Requirements

Method of Determining Final Course Grade

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams – written tests designed to measure knowledge of presented course material

Exercises – written assignments designed to supplement and reinforce course material

Quiz - in class or take home quiz designed to measure ability to apply presented course material

Group project – written questions for group discussions

Grading Matrix (points will vary according to instructor's grading system)

| Instrument | Value (points or percentages) | Total |
|---------------------------------|---|-------|
| Assignments (Lab Reports) | Pre-lab, Experimental data, Post- lab assignments at 50 points each | 300 |
| Papers | | |
| Exercises | 2 exercises at 50 points each | 100 |
| Quizzes | | |
| Projects | | |
| Mid Term Exam | | |
| Class Participation/ Discussion | 100 | 100 |
| Final Exam | 100 | 100 |
| Total: | | 600 |

Grade Determination:

A = 90%

B = 80%-89%

C = 70%-79%

D = 60%-69%;

F = 59% or below

Total:600

Grading Criteria and Conversion:

A = 90%

B = 80% - 89%

C = 70%-79%

D = 60%-69%;

F = 59% or below

Grading Criteria and Conversion:

Detailed Description of Major Assignments: [Describe in each assignment valued at 10% of grade or more]

Assignment Title or Grade Requirement

Description

[NOTE: Insert or remove row(s) as needed]

Course Procedures or Additional Instructor Policies

Taskstream

Taskstream is a tool that Prairie View A&M University uses for assessment purposes. One of your assignments may be considered an "artifact," an item of coursework that serves as evidence that course objectives are met.

More information will be provided during the semester, but for general information, you can visit Taskstream via the

5 WEEK CALENDAR

Week One: Topic TECH 700 safety,

Chapter (s): TECH 700 Safety,

Assignment (s): Prelab, postlab in the manual

Week One: Topic

Chapter (s): REACT 714: Studying SN1 and SN2 Reactions

Assignment (s): Prelab, postlab in the manual

Week Two: Topic REACT 716: Nitrating Acetanilide or Methyl Benzoate

Chapter (s) Nucleophilic Aromatic Substitution

Assignment (s)

Week Two

Chapter (s): TECH Separating a Mixture of Biphenyl, Benzhydrol, and Benzophenone by Thin-

Layer Chromatography

Assignment (s): Prelab, postlab in the manual

Week Three: Topic TECH 710: Identifying an Unknown Compound by Infrared Spectroscopy

Chapter (s): TECH 710: Identifying an Unknown Compound by Infrared Spectroscopy

Assignment (s): Prelab, postlab in the manual

Week Four: Topic TECH 711: Using Nuclear Magnetic Resonance Spectroscopy

to Identify an Unknown compound

Chapter (s): TECH 711: Using Nuclear Magnetic Resonance Spectroscopy

to Identify an Unknown compound

Assignment (s): Prelab, postlab in the manual



(if there are any special instructions relating to assignment submissions, they should be discussed here)

Formatting Documents:

Microsoft Word is the standard word processing tool used at PVAMU. If you're using other word processors, be sure to use the "save as" tool and save the document in either the Microsoft Word, Rich-Text, or plain text format.

Exam Policy

Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook). (if there are any other special instructions relating to exams, they should be discussed here)

Professional Organizations and Journals

(if applicable to your course or program, they should be listed here)

References

(if applicable to your course or program, references should be listed here)

Student Support and Success

John B. Coleman Library

The library and its partners have as their mission "to provide resources and instructional material in support of the evolving curriculum, as a partner in Prairie View A&M University's mission of teaching, research, and service" and to support the University's core values of "access and quality, diversity, leadership, relevance, and social responsibility" through emphasis on ten key areas of service. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty.

Center for Academic Support

The Center for Academic Support (CAS) offers Tutoring via peer tutoring. The services include workshops (i.e., Save My Semester, Recalculate Your Route), seminars (i.e., Tools You Can Use: TI-84), group review sessions (i.e., College Algebra Topic Reviews, GRE Preparation), group study opportunities (i.e., TSIA, HESI, Study Break, Exam Cram), and test-taking strategies (How to take Notes, Study Buddy, 5 Day Study Guide). The Tutoring Center is a nationally certified tutoring program through the National Tutoring Association. The peer tutors are trained and certified by the coordinator each semester. Location: J.B. Coleman Library

COMPASS

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS) is designed to help Prairie View students in their second year and beyond navigate towards graduation by providing the following services: Academic Advisement, Targeted Tutorials for Personalized Learning, Campus-Wide Referrals, and Academic & Social Workshops. Location: J.B. Coleman Library

Writing Center

The Writing Center provides student consultants on all aspects of the writing process and a variety of writing assignments. Writing Center consultations assist students in such areas as prewriting, brainstorming, audience awareness, organization, research, and citation. Location: Hilliard Hall 121

University Rules and Procedures

Disability statement (See Student Handbook):

Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

Academic misconduct (See Student Handbook):

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of academic dishonesty:

- 1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
- 2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
- 3. Fabrication: use of invented information or falsified research.
- 4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.

Nonacademic misconduct (See Student Handbook)

The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated.

An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual misconduct (See Student Handbook):

Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Attendance Policy

Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class.

Student Academic Appeals Process

Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

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TECHNICAL CONSIDERATIONS

Minimum Recommended Hardware and Software:

- Intel PC or Laptop with Windows 7; Mac with OS X; Smartphone or iPad/Tablet with Wi-Fi
- High speed Internet access
- 8 GB Memory
- Hard drive with 320 GB storage space
- 15" monitor, 800x600, color or 16 bit
- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- Most current version of Google Chrome, Safari, Internet Explorer or Firefox

Note: Be sure to enable Java & pop-ups

Participants should have a basic proficiency of the following computer skills:

- Sending and receiving email
- A working knowledge of the Internet
- Proficiency in Microsoft Word (or a program convertible to Word)
- Proficiency in the Acrobat PDF Reader
- Basic knowledge of Windows or Mac O.S.

Netiquette (online etiquette):

Students are expected to participate in all discussions and virtual classroom chats as directed. Students are to be respectful and courteous to others on discussions boards. Foul or abusive language will not be tolerated.

Technical Support:

Students should go to https://mypassword.pvamu.edu/ if they have password issues. The page will provide instructions for resetting passwords and contact information if login issues persist. For other technical questions regarding eCourses, call the Office of Distance Learning at 936-261-3283

Communication Expectations and Standards:

Emails or discussion postings will receive a response from the instructor, usually in less than 48 hours. Urgent emails should be marked as such. Check regularly for responses.

Discussion Requirement:

Online courses often require minimal to no face-to-face meetings. However, conversations about the readings, lectures, materials, and other aspects of the course can take place in a seminar fashion. This will be accomplish by the use of the discussion board. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it should be copied and pasted to the discussion board.