TAN TAO UNIVERSITY
Address: Tan Tao University Avenue
Tan Duc E. City, Duc Hoa District, Long An Province
Phone: (+84-72) 376 9216 - Fax: (+84-72) 376 9208
Website: www.ttu.edu.vn - Email: info@ttu.edu.vn

TAN TAO UNIVERSITY
FROM KNOWLEDGE TO THE STARS

TRƯỜNG ĐẠI HỌC TÂN TẠO

COURSE SPECIFICATIONS

Major: Biotechnology and Applied Biology

Program type: Undergraduate

TTU Student Honor Code

"Student members of the Tan Tao University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work."

1. Course name: BT_AB105/18/19 Organic Chemistry
2. Credits: 4.0
3. Student level: 2nd year
4. Term: 2021 Spring
5. Time distribution
    - 5.1. Class: 75 periods
    - 5.2. Theory periods: 45
    - 5.3. Practice periods: 30
    - 5.4. Assessment periods: 75
    - 5.5. Self-study: 150 hours
6. Prerequisites: CHEM101 Core Concepts in Chemistry
7. Learning outcomes
    - 7.1. Knowledge
        - 7.1.1. Gaining basic knowledge of bind types in organic molecules.
        - 7.1.2. Describing structure of organic molecules
        - 7.1.3. Explaining chemical reaction of hydrocarbon and functional groups in organic chemistry.
        - 7.1.4. Depicting chemical reaction of organic compounds, particularly, in pharmaceutical and medicine field.
    - 7.2. Skill
        - 7.2.1. Calculate double bond equivalent and draw structure of organic compound.

7.2.2. Draw organic reactions and describe reaction mechanism.

7.3. Behavioral competency

7.3.1. Scientifically understand and respect natural processes.

8. Course description: The course expresses fundamental knowledge of organic and bio-organic chemistry. Moreover, the students are able to understand the basically organic reaction and mechanisms.

9. Student tasks: Learners are expected to attend regularly in order to listen to lectures and participate in discussions. They will complete theory problems. Outside of class, students are expected to solve problems daily, read all material in order to discuss it next class.

10. Learning materials

Chemistry for pharmaceutical Student - General, Organic and Natural Product Chemistry, *S. D. Sarker, L. Nahar, John Wiley & Sons Ltd.*

11. Assessments

11.1. Evaluation criteria

Assessments		
1	Attendance, reports and discussion	20%
3	Midterm	40%
4	Final exam	40%
TOTAL		**100%**

11.2. Point calculation

11.2.1. Assessment 1: Discussion is students' personal opinions and feedback on topics in class. The homework assignments will be provided references which the students are requested to solve problems.

11.2.2. Assessments 2 and 3: The midterm and final exam consist of knowledge-based questions related to in-class lectures and problems. They are marked by answer key.

12. Grading guidelines

TTU percentages	Letter Grade	GPA
97-100	A+	4.0
93-96	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7

TTU percentages	Letter Grade	GPA
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
65-69	D	1.0
0-64	F	0.0

The minimal passing grade is C for all students as this is a university core course.

13. Scope and sequence

Week	Content	Periods	Materials and tasks
1	Introduction to organic chemistry	3	
2	Alkane and alkene	3	
3	Alkyne and aromatic compounds	3	
4	Hydrocarbon problems	3	
5	Isomerism	3	
6	Stereochemistry	3	
7	Stereochemistry problems and mid exam	3	
8	Alcohol and phenol	3	
9	Aldehyde and ketone	3	
10	Acid and ester	3	
11	Amines	3	
12	Nucleic acid	3	
13	Problems of compounds bearing nitrogen	3	
14	Summary	3	
15	Final exam	3	
16	Practice 1. Chemoffice	9	
17	Practice 2. Distillation of Essential oils	7	
18	Practice 3. Crystallization	7	
19	Practice 4. Synthesis of benzoic acid	7	

Full name of course lecturer: Nguyen Thanh Danh, PhD

Signature: _____

Full name of department head: Nguyen Dinh Truong, PhD

Signature: _____

Date: _____