SYLLABUS - CHEM 244 ORGANIC CHEMISTRY II - SPRING 2023 Dr. Edward Brush

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Instructor Information:

- Where can you find me? My office is DMF 407
- How can you schedule a meeting with me? Feel free to stop in and chat about class, careers, research, etc.
 - O Please use this <u>e-signup sheet</u> to schedule a formal meeting during my normal office hours (Tuesday & Wednesday, 3:30 5:00 pm), or some other time.
 - O You can request either an in-person or a Zoom meeting (the Zoom link is in Blackboard)
 - o My door is always "open". If you are in DMF feel free to stop by!
- Contact info: ebrush@bridgew.edu; 508-531-2116
- Course Web page: http://webhost.bridgew.edu/ebrush/

Class Meetings (DMF 477/481): CHEM 244-001 MWF, 8:00 - 8:50 AM

CHEM 244-002 MWF, 10:10 - 11:00 AM

Laboratory (**DMF 477 & 481**): CHEM 244 Labs will begin the week of January 23. **PLEASE NOTE:** All lab students are required to use **Visorgogs** or full-coverage safety goggles in all chemistry laboratories. **Visorgogs** in the **bookstore** sell for \$14, and on **Amazon** sell for ~\$12. The goggles are listed in the book requirements for each chemistry lab course on the Bookstore website.



You Belong In This Class!

All students deserve a safe learning environment, and your contributions are important and respected.

You Have A Right To Accommodations!

Accommodations are changes that instructors must make to improve our course delivery and/or assessment tools. If you need accommodations for this course, please talk to me or contact **Student Accessibility Services** at SAS@bridgew.edu or 508-531-2194.

Your health and safety are my number one priorities!

Masks are required and are available in our classroom.

Please complete this <u>Class Survey</u> by Friday, January 20 at 12:00 noon: https://forms.gle/KKPmhK6u6CCujrzR9. There will be time in class on Friday to complete the survey.

IMPORTANT DATES:

January 25 (W): Last day to Drop/Add

February 20 (M): No classes – President's Day

February 22 (W): Monday Schedule (no Wednesday classes)

March 6-10 (M-F): No classes – Spring Break! April 6 (R): Last day to withdraw April 17 (M): No classes – Patriots Day

April 27 – May 9: StARS Symposium (Hybrid Event)

May 1 (M): Last day of classes May 2 (T): Reading Day

May 5 (F) & 8 (M): Optional CHEM 244 Exam V (8-10 am)

May 9 (T): "I Survived Organic Chemistry" Pizza Party and T-Shirts!

Spring 2023 COVID Health Protocols

For additional information on BSU's Spring protocols, please visit the **COVID-19 webpage**, where you can find BSU's requirements, report a positive test result and attest to being vaccinated.

Message from BSU President Fred Clark, January 12, 2023:

"In addition to the widespread prevalence of the flu and other respiratory ailments, Massachusetts and this region continue to be areas of high COVID-19 transmission, with rising levels of positive cases and hospitalizations. Together, we can protect our campus community by following some simple measures."

Masking

- We continue to require that masks be worn in all classrooms and instructional spaces during scheduled class times, although faculty have the option of NOT requiring mask wearing in their classes.
- While BSU remains a mask-optional campus (except for classrooms and instructional spaces), we encourage the use of masks and have ample supplies of free medical procedure masks available in locations across campus.

Testing

- Rapid tests will continue to be made available at no cost and can be picked up at distribution sites across the campus, including the Wellness Center, Tinsley Center and RSU welcome desk.
- We ask people with symptoms or who have been exposed to people with COVID to test and report any positive results via our COVID-19 reporting form.

Vaccine

- We encourage everyone who is eligible to get the bivalent "booster" vaccine, which is effective against the Omicron variants of COVID.
- Booster vaccines are available at the Wellness Center throughout the semester. Please use this <u>link</u> to view available times and book your booster now. There is no charge for any COVID vaccinations.

Get Help

We all struggle with emotional, financial and other issues at different times in our lives. To assist our faculty and staff, who want to help students (and colleagues) coping with these stressors, we urge you to visit the recently revised <u>website</u> to learn more about the amazing resources BSU has available to help students and others.

As BSU Bears, we have a responsibility to care for each other. Thank you in advance for following our COVID requirements and keeping everyone in our community safe.

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### DIVERSITY, EQUITY, INCLUSION AND BELONGING

It is imperative, more so now than ever, to address questions related to diversity, equity, inclusion and belonging. We have been saddened, appalled, and horrified by numerous tragic events, including the murder of George Floyd, the disproportionate impacts from the COVID-19 pandemic, as well as other environmental injustices impacting human health. We must listen, learn and respect each other, as we uncover broader inequalities based on race, gender, income, and those focused on the LGBTQ+ and immigration communities. Diversity, Inclusion, Equity and Belonging must be an integral part of BSU strategic priorities.

As the "central science", the field of chemistry is uniquely positioned to provide an understanding of, and contribute solutions to, complex global problems. To accomplish this, we must be able to effectively collaborate as a Team, with people who have diverse perspectives and life experiences in order to understand the challenges facing the world in the 21<sup>st</sup> century and develop and apply the strategies needed to help solve them.

I am personally committed to create a learning environment that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.). If you feel that your performance in this class is being impacted by your experiences in- or outside of class, please don't hesitate to come and talk with me. If you prefer to speak with someone outside of the course, please let me know.

I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that made you feel uncomfortable, please talk to me about it.

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### CHEM 244 COURSE DESCRIPTION, LEARNING OBJECTIVES AND GOALS

**Course Description.** CHEM 244 Organic Chemistry II (4 credits). This is the second semester of an introductory course in organic chemistry designed for students majoring in biology, chemistry, earth sciences, and geography. CHEM 244 carries four credits earned by three hours of lecture, one hour of recitation, and three hours of laboratory work weekly. **Prerequisite: minimum C- grade in CHEM 243.** 

**Learning Outcomes CHEM 244 Organic Chemistry II Lecture.** Students who successfully complete this course will be able to...

- Apply the basic principles that govern covalent bonding concepts to the structure of organic compounds including the octet rule, Lewis structures, formal charge, hybridization and resonance;
- Recognize families of organic compounds based on their functional groups, and apply nomenclature rules to draw formulas, structures, and write the names of organic compounds;
- Explain the role of chemical structure, hybridization, resonance and inductive effects on acid/base strength, and apply acid/base theory to correlate structure and reactivity in the context of the reactions and mechanisms of organic compounds;
- Draw and name structures and stereoisomers; recognize and assign configurations;
- Apply knowledge of functional group reactivity to propose reasonable mechanisms for basic organic chemistry
  reactions using "curved arrow" designations, and apply knowledge of reaction mechanism to predict and explain
  the outcome of a reaction, relative reactivity, and stereochemistry.
- Explain and apply the concept of aromaticity and determine if a compound is aromatic, anti-aromatic, or nonaromatic;
- Describe the techniques of Nuclear Magnetic Resonance spectrometry, Infrared spectroscopy, and Mass Spectroscopy, and use spectroscopic data to determine molecular structures;
- Plan multi step synthesis of organic compounds using retrosynthetic analysis and functional group interconversions.

Goals of this Course. Organic Chemistry is the "Chemistry of Life", and is essential for students pursuing careers in the biological, chemical, environmental, health and medical sciences, as well as biochemistry, genetics, the pharmaceutical sciences and medicinal chemistry. You may want to consider working on a research project in Bio-organic Chemistry, Green Chemistry, or Chemical Sustainability as the discipline is rich in basic research that has led to numerous advances in biomedicine, the design and synthesis of modern materials, and development of safer products for society. Examine your surroundings; almost everything around you is composed of organic molecules, including the biomolecules in your own body, not to mention the numerous bioorganic reactions occurring in all living organisms.

### My goals are to help you develop:

- I. A solid foundation in the basic facts and concepts of organic chemistry;
- II. The confidence to work together collaboratively in solving problems; and
- III. An understanding that the field of organic chemistry is dynamic, exciting and essential to all life processes.

This will be accomplished through the following objectives in the lecture and laboratory:

- 1) This course will help you build a solid foundation of facts and fundamental principles in organic chemistry that you will be able to apply to intermediate and advanced courses in biology, biochemistry, chemistry, and geological sciences, as well as to research in any of these fields;
- 2) Through *student-centered learning* you will develop the confidence to take charge of your own learning by working together with other students to develop skills in problem solving, critical thinking and decision making as you collaboratively discover new information and solve problems.
- 3) The lab portion of the course will clarify some concepts discovered in lecture, and will help you develop confidence to apply laboratory methods to conduct research and create new knowledge in organic chemistry;
- 4) You will gain a better appreciation of how collaborating with other students who have diverse backgrounds, life experiences and skills can help you to use your chemistry content knowledge to identify and understand big global problems, and contribute to their solutions.

### **CHEM 244 COURSE REQUIREMENTS AND RESOURCES**

**All lecture and lab sections are meeting in-person.** Our in-person "lecture" classes will meet in the well-ventilated organic chemistry labs (DMF 477/481). You will have access to sanitizing wipes, hand sanitizer and masks.

**Attending class virtually (Zoom).** If you are ill, have tested positive for covid, have covid-related symptoms, or are required to be in isolation, **DO NOT come to class!** Stay away and rest! You can use the "Zoom option" to join class:

- o Send me an email AT LEAST ONE HOUR BEFORE CLASS
- o I will confirm your Zoom attendance, and email you the group worksheet
- o You can join class using the Zoom class link found in Blackboard.
- O You will work with your group, virtually completing the daily worksheet.
- o You must turn on your camera and participate in group discussions
- o The Zoom option can only be used for students who are ill
- You can use the Zoom option up to three times during the semester
- o If you are a close-contact, are vaccinated, and have no symptoms, you can still attend class!

**I encourage all students to bring a laptop/tablet to every class.** You can use your computer to answer questions on worksheets and for project work. All students are expected to have access to a computer and the technology to access the internet. The Maxwell Library Circulation Desk has loaner devices (laptops, Chromebooks, iPads, wireless hotspots, etc.) available for you to borrow: 508-531-1392 or visit <a href="https://www.bridgew.edu/technology/itloaners">https://www.bridgew.edu/technology/itloaners</a>. I can also provide loaner laptops.

**Required Software.** Many of the worksheets and other documents for our class are in **Microsoft Word or Adobe PDF**. You will also need to access **Microsoft Teams.** You must have these applications in order to open and work with class documents. You can download the Microsoft Office Suite here: <a href="https://www.bridgew.edu/ccs/online/student/technical-requirements">https://www.bridgew.edu/ccs/online/student/technical-requirements</a>. We will also work with **ChemBioOffice** structure drawing software. Instructions to download this free software will be provided in lab.

**Blackboard and On-line Security:** <a href="https://bridgew.blackboard.com/">https://bridgew.blackboard.com/</a>. Our course Blackboard site will be the only source for Zoom links to virtually join our class or my office hours.

**Course Resources.** All course resources (class videos, documents) can be accessed through my CHEM 243-244 course webpage: <a href="http://webhost.bridgew.edu/ebrush/">http://webhost.bridgew.edu/ebrush/</a>.

**Attendance and Group Work Policy.** Class Attendance is critical to your success! In our "flipped" classroom you have a responsibility to your group to come to class prepared, and actively engage in problem solving. We cover material at a rapid pace and if you fall behind it is very difficult to catch up. *I expect you to attend class each day and arrive on time*.

- I do track attendance through our daily worksheets, and make note of late arrivals.
- I will not penalize students who <u>occasionally</u> miss class or arrive late. If you miss excessive class work, I will request a meeting to talk about how we can do better.
- As we have group worksheets in <u>every</u> class, you will lose worksheet points if you miss an excessive number of classes, or arrive to class late. To get full credit for a worksheet it must be done in collaboration with your group.
- Group work and collaboration with your team is critical to your success. There will be a peer evaluation at the end of the semester where you will be evaluated by your peers based on how you contributed to group work.

If you have tested positive for covid, or have covid-related symptoms, you may not attend class.

Missing class for other reasons. The Zoom option only applies if you are ill or for covid-related issues. If you miss class for any other reason, you will not get credit for the daily worksheet. However, all students will be able to earn "Bonus Points" that will offset missed worksheets and/or low scores on daily worksheets. All students will have the opportunity to "bank" a maximum of 40 points that will offset up to four missed classes.

**E-mail.** You are responsible for all e-mail communications sent by your instructor and your classmates to your BSU e-mail account. It is important that you check your BSU e-mail every day so that you do not miss important communications from your instructor and classmates.

**Peer Leader Office Hours.** The organic chemistry Peer Leaders will hold office hours and study sessions to help you master course material covered during the week.

**Textbook Requirement**. I *do not* have a "formal" textbook requirement. There are numerous on-line resources for learning organic chemistry. For this reason, I do not have specific textbook requirement. *However all students are required to identify an organic chemistry resource to help you succeed in this course.* Here are several low-cost and free options (also listed on the course web page):

- CHEM 243-244 Organic Chemistry Web Page (<a href="http://webhost.bridgew.edu/ebrush/">http://webhost.bridgew.edu/ebrush/</a>). The following course material is available: Lecture and lab syllabi, lab handouts and reading assignments, worksheets, and answer keys.
- Buy a used organic chemistry text on-line (check with me before buying).
- Sign-out an organic chemistry textbook from Dr. Brush
- Find your own on-line resource (NOT Wikipedia!). Here are a few free organic chemistry resources. The URL can also be found on the course web page:
  - Khan Academy Organic Chemistry (videos): (https://www.khanacademy.org/science/organic-chemistry)
  - <u>Virtual Organic Chemistry Textbook</u> (rated as excellent): (http://www2.chemistry.msu.edu/faculty/reusch/VirtTxtJml/intro1.htm)
  - o LibreTexts Organic Chemistry Textbook
  - Organic Chemistry Practice Problems: (http://www2.chemistry.msu.edu/faculty/reusch/VirtTxtJml/Questions/problems.htm)

# Course Notebook. All students are <u>required</u> to take hand-written notes and maintain a notebook or binder for your course material.

You are expected to bring your notebook to class every day. There will be unannounced checks of your course notebook for either worksheet or Bonus Points. You will be allowed to use your course notebook during exams, but not any other course material unless provided by me during the exam.

**Responsibilities of the student.** By registering for this course, you have accepted the responsibility expected of all BSU students: *it is the student's responsibility to take the initiative to learn the course material!* Examples include:

- respecting your classmates, Peer Leaders, and the course instructor
- coming to class and lab prepared and on time
- taking exams as scheduled
- notifying the course instructor ahead of time if you will miss a class
- collaborating on worksheet problems in class
- keeping an up-to-date lecture notebook
- turning in assignments on time
- taking advantage of office hours

**Responsibilities of the instructor.** I will be as accessible as is reasonably possible, and it is my responsibility to provide all students with every opportunity to master the material covered in this course.

### **GRADING POLICY – Subject to Change!**

| <b>Grading Instrument</b>                   | Points | % of final grade |
|---------------------------------------------|--------|------------------|
| Group Worksheets (10 points each worksheet, | 150    | 15%              |
| scaled to 150 points)                       |        |                  |
| Exams (individual, 4 x 150 points each)     | 600    | 60%              |
| Group Project                               | 100    | 10%              |
| Lab grade                                   | 150    | 15%              |
| TOTAL                                       | 1000   | 100%             |

**Final Grade.** Assigned at the end of the semester based on the following scale: A's (90+), B's (80-89), C's (70-79), D's (60-69), F (<60). All graded work will be assigned a numerical score that will not be curved. **Note: an "A" grade requires a 95% average, and a "C-" requires a 70% average.** 

**Return of Course Work to Students.** I will return graded work to you as quickly as I can. I will not list your grades in Blackboard so its important that you keep your own record of graded work. All worksheets, exams and answer keys will be posted to the course web page.

**Group Worksheets.** Your goal is to earn 150 "Worksheet Points" (15% of your grade). This can be accomplished by:

- Daily group worksheets in class. You will collaborate with your group on each worksheet for a group grade. Group worksheets may NOT be done individually or outside of class. **Point deductions will be made if you arrive late or leave early.**
- My worksheets are designed with the assumption that you have: (1) watched the videos, (2) taken notes, (3) have your notebook open on your bench, and (4) are working with your group in solving worksheet problems.
- **Bonus Points.** These will be used to replace missed worksheets and/or low worksheet grades. There will be opportunities to earn Bonus Points through the semester, including:
  - o Worksheet "Zero" a review of key concepts from CHEM 243
  - o Bonus questions on group worksheets
  - o Maintaining an up-to-date course notebook (I may add or subtract from your Bonus Point total)

**Class Project.** The class project (described below) requires: (1) group work, (2) the reading of assigned material or watching assigned videos outside of class, (3) the completion of group work in your MS Teams e-notebook, and (4) a group presentation at the StARS Symposium.

### Exams.

- There will be a total of four exams (150 points each), each scheduled on a Friday, that must be done individually. You will be told what topics will be covered on each exam, you will be provided with a detailed Study Guide, there will be an in-class review the Wednesday prior to each exam, and there will be a Study Session the Thursday before each exam.
- If you miss an exam, you can take a make-up exam on the Monday following the scheduled exam date. Each student gets <u>one make-up exam</u>, but only if you provide documentation for an illness or an emergency. If you miss additional exams, for any reason, you will get a zero score.
- Please note that all students have the option to replace your <u>lowest</u> exam grade by taking an optional "Exam V" at the end of the semester. There is no formal final exam.

**Optional "Exam V".** I do not give a formal Final Exam. On Reading Day, I will notify each student about their "final" course grade. Students will then have the option of accepting that "final" grade, or taking "Exam V" to replace their lowest exam grade and improve their final grade. Exam V will be given during the final exam period, will be the same length and format as a semester exam, you will have the same amount of time (50 minutes), and you will be told in advance what topics will be covered.

### FLIPPED CLASSROOM

In the flipped classroom, basic information will be made available prior to class through short, YouTube video "lectures". URL links to these videos are posted on the class web page and allow students to learn from anywhere, and at your own pace. This way we can spend valuable class time making sense of the material through problem solving! You can discuss course concepts with other students, the Peer Leaders, and the course instructor.

For you to take full advantage of the flipped classroom the following points are critical:

# Attendance......Preparation.....Engagement

- For each class you will be assigned 1-3 lecture videos (see schedule below).
- Before coming to class, you will watch the videos and take notes in your required course notebook.
- You may not watch lecture videos during class.
- **During class,** you will work together in groups of 3-4 students on class worksheets for a group grade. Group worksheets may NOT be done individually or outside of class.
- My worksheets are designed with the assumption that you have:
  - (1) watched the videos **BEFORE** coming to class
  - (2) taken notes in your required notebook
  - (3) have your notebook open on your bench, and
  - (4) are working with your group in solving worksheet problems.

### Point deductions will be made:

- o If you arrive to class late or leave early. If you know that you will arrive to class late or need to leave early, please let me know ahead of time.
- o If you are watching the assigned videos during class time.
- Worksheets and answer keys will be posted to the class web page by 5 pm on each class day, so you can practice and review.
- If you consistently arrive to class unprepared, I will request a meeting to discuss how we can do better.

# Flipped Class Advantages: Learning becomes a shared responsibility between students and instructor Flexible learning environment that goes where you go You can learn at your own pace You can catch up on missed work You can review at any time We can spend more class time for indepth learning and discussion Instructor works more closely with students Improved engagement and collaboration between students

Edited graphic from ViewSonic: <a href="https://www.viewsonic.com/library/education/what-is-the-flipped-classroom-model/">https://www.viewsonic.com/library/education/what-is-the-flipped-classroom-model/</a>

### UNDERGRADUATE RESEARCH AT BSU!!!!!

Did you know that the Undergraduate Research Program at BSU is ranked as one of the very best in the country? In January 2020 the Council on Undergraduate Research (CUR) presented BSU its <a href="Campus-Wide Award for Undergraduate Research Accomplishments">Campus-Wide Award for Undergraduate Research Accomplishments</a> (AURA). BSU has semester and summer grants for faculty-student research, and you can learn more about these opportunities through the <a href="Office of Undergraduate Research">Office of Undergraduate Research</a>, or by talking to me!

No time for formal lab research? I also realize that many students are not able to participate in formal lab research in the sciences due to work, family obligations, or other responsibilities. The good news is that BSU will be piloting a new program to conduct **virtual research** specially designed for these students! To learn more PLEASE contact me!

CHEM 243-244 Class Project: Global Warming, Climate Change, Green Chemistry and Carbon Capture. Does chemistry do a good job solving global problems? Can teams of students effectively collaborate to understand and solve these problems? You will be engaged in a class project to explore a global problem, and investigate how *green and sustainable chemistry* can provide solutions. Our context comes from the <a href="UN Sustainable Development Goals">UN Sustainable Development Goals</a> (SDGs), the world's "to-do" list, that offers an agenda to address world-wide challenges of poverty, protecting the planet and ensuring prosperity.

Chemists must play a key role in achieving these goals. As part of our normal class work you will explore the problem of global warming and climate change, understand the connections to the UN SDGs, and learn how green chemistry can contribute to reducing the impacts of greenhouse gases through *carbon capture*. Specifically, how liquids can capture the greenhouse gas carbon dioxide (CO<sub>2</sub>), a known contributor to global warming and climate change. You will each learn to appreciate the unique skills that individual students can bring to a project team, and apply your chemistry knowledge to understanding the challenges and opportunities of carbon capture. Outcomes of this project include:

- Your group will present your project at the BSU StARS Symposium. Your group will work together preparing and giving a presentation on the class project. This presentation grade will be part of your Project Grade.
- Be able to answer the question on how organic chemistry can contribute to solving global problems.
- Some of you may be interested in participating on a more formal research project. My research group is exploring:
  - o Experimental ideas about carbon capture by *ionic liquids*.
  - o Developing innovative solutions for using or storing the captured CO<sub>2</sub> (waste or resource?).
  - O How carbon capture can be used to remove CO<sub>2</sub> during long term human space flight.
  - o Identifying, understand and solving existing and emerging issues related to environmental injustice.

Undergraduate Research. My research group uses green chemistry to help address global issues related to the grand challenges of sustainability. We are currently studying the efficiency of different liquids to capture carbon dioxide from air. The reaction above is the synthesis of an ionic liquid which has an unusual capacity to capture  $CO_2$ . Greenhouse gases like  $CO_2$  contribute to global warming and climate change. The goals of our research are to better understand the chemistry of  $CO_2$  capture by liquids, what to do with the  $CO_2$  after it is "captured", and how to incorporate these concepts into K-12+ education. You will have the oppoortunity to learn more about this project as part of this class.

### CHEM 243 TOPICS AND WEEKLY SCHEDULE - Subject to Change!

Multistep Synthesis: The Grignard Reaction Videos 12-1 to 12-4 Videos 9-1 to 9-7 Infrared Spectroscopy and Nuclear Magnetic Resonance Spectrometry **Introduction to Aromatic Compounds** Videos 14-1 to 14-3 Reactions of Aromatic Compounds Videos 15-1 to 15-7 Videos 16-1 to 16-4 Aldehydes & Ketones – Nucleophilic addition to the carbonyl carbon Videos 17-1 to 17-4 Carboxylic Acids and Their Derivatives – Nucleophilic addition-elimination reactions Videos 18-1 to 18-2 Reactions at the  $\alpha$ -carbon of carbonyl compounds – Enols and enolates Videos 19-1 to 19-2 Condensation and conjugate addition reactions of carbonyl compounds (Aldol condensation) Videos 20-1 Amines Polymer I & II Polymers and Biological Acid & Bases

| Dates            | CHEM 244 Videos                            | Classwork                              |
|------------------|--------------------------------------------|----------------------------------------|
| January 18 (W)   | Introduction to CHEM 244; Mechanism Review | Worksheet "Zero"; Project activity     |
| January 20 (F)   | Worksheet "Zero"                           | Worksheet "Zero" due; class survey due |
| January 23 (M)   | 12-1 to 12-2                               | Worksheet #1                           |
| January 25 (W)   | 12-3 to 12-4; Last day to Drop/Add         | Worksheet #2                           |
| January 27 (F)   | Group Project Work                         | Project-1                              |
| January 30 (M)   | 9-1 to 9-2                                 | Worksheet #3                           |
| February 1 (W)   | 9-3 to 9-4                                 | Worksheet #4                           |
| February 3 (F)   | 9-5 to 9-6                                 | Worksheet #5                           |
| February 6 (M)   | 9-7                                        | Worksheet #6                           |
| February 8 (W)   | EXAM I REVIEW                              | Worksheet #7                           |
| February 10 (F)  | EXAM I                                     |                                        |
| February 13 (M)  | Group Project Work                         | Project-2                              |
| February 15 (W)  | 14-1 to 14-2                               | Worksheet #8                           |
| February 17 (F)  | 14-3 to 15-1                               | Worksheet #9                           |
| February 20 (M)  | NO CLASSES – President's Day               |                                        |
| February 22 (W)  | 15-2 to 15-3; MONDAY SCHEDULE              | Worksheet #10                          |
| February 24 (F)  | 15-4 to 15-5                               | Worksheet #11                          |
| February 27 (M)  | 15-6 to 15-7                               | Worksheet #12                          |
| March 1 (W)      | EXAM II REVIEW                             | Worksheet #13                          |
| March 3 (F)      | EXAM II                                    |                                        |
| March 6-10 (M-F) | SPRING BREAK                               |                                        |
| March 13 (M)     | Group Project Work                         | Project-3                              |
| March 15 (W)     | 16-1 to 16-2                               | Worksheet #14                          |
| March 17 (F)     | 16-3                                       | Worksheet #15                          |
| March 20 (M)     | 16-4                                       | Worksheet #16                          |
| March 22 (W)     | 17-1 to 17-2                               | Worksheet #17                          |
| March 24 (F)     | 17-3                                       | Worksheet #18                          |
| March 27 (M)     | 17-4                                       | Worksheet #19                          |
| March 29 (W)     | 18-1                                       | Worksheet #20                          |
| March 31 (F)     | 18-2                                       | Worksheet #21                          |
| April 3 (M)      | EXAM III REVIEW                            | Worksheet #22                          |
| April 5 (W)      | EXAM III REVIEW                            | Worksheet #23                          |
| April 7 (F)      | EXAM III                                   |                                        |
| April 10 (M)     | Group Project Work                         | Project-4                              |
| April 12 (W)     | 19-1                                       | Worksheet #24                          |
| April 14 (F)     | 19-2                                       | Worksheet #25                          |
| April 17 (M)     | NO CLASSES – Patriot's Day                 |                                        |
| April 19 (W)     | 20-1                                       | Worksheet #26                          |
| April 21 (F)     | Polymer-1                                  | Worksheet #27                          |
| April 24 (M)     | Polymer-2                                  | Worksheet #28                          |
| April 26 (W)     | EXAM IV REVIEW                             | Worksheet #29                          |
| April 28 (F)     | EXAM IV                                    |                                        |
| May 1 (M)        | NO CLASS                                   |                                        |
| May 5 and 8      | OPTIONAL EXAM V                            |                                        |
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BSU RESOURCES FOR STUDENT SUCCESS

BSU's safety recommendations and mandates for the Spring 2023 semester.

Technical Requirements & Support: https://www.bridgew.edu/ccs/online/student/technical-requirements.

Issues with Blackboard, Zoom or BSU email. I will contact you via email to provide you with an alternative means of completing course assignments or due date extensions. If you experience technical issues, please **contact the IT Service Center** and provide as many details as possible, including screenshots, so that the IT Service Center can best assist you.

The Academic Achievement Center. The AAC provides students with academic services and resources that propel them toward successful and timely degree completion. The AAC is the largest hub of student academic services on campus, offering services both online and in-person. The AAC is comprised of four major support areas: Academic Advising (first-semester freshmen), Student Accessibility Services, Learning Assistance (Academic Coaching and Tutoring), and Testing Services.

<u>Learning Assistance (LA) consists of both Academic Coaching and Tutoring.</u> Tutoring areas include: Math Services, the Accounting & Finance Lab, Writing Studio, Tutoring Central (100/200 introductory and Core Curriculum courses), and Second Language Services. To make an appointment for Tutoring or Academic Coaching, please sign into our platform, <u>Accudemia</u>, using your BSU credentials.

Student Accessibility Services. As a member of the Bridgewater State University community, it is my goal to create a learning experience that is accessible for all students – including those with disabilities. BSU's commitment to students with disabilities is not only shaped by legal requirements but is also driven by our commitment to social justice and ensuring a fully accessible University experience to our community. Students with disabilities are encouraged to collaborate with Student Accessibility Services to confidentially explore accommodations and other resources available to them. SAS can be reached at SAS@bridgew.edu or 508.531.2194.

Student Code of Conduct. The Student Code outlines expectations for student conduct, including provisions related to the University's COVID-19 Safe Return Plan. Bridgewater State University is a community dedicated to the lifelong success of all students. All students are expected to adhere to the core values of the university community which include civility, fairness, inclusivity, and respect for others' dignity. The *Student Code of Conduct* defines the rights and responsibilities of students and provides a process for responding to allegations of student misconduct in a way that aligns with the university's values.

Title IX and Sexual Violence

The Office of Equal Opportunity and the Title IX Coordinator work to ensure that all members of the campus community flourish in a supportive and fair climate. See https://studentbridgew.sharepoint.com/sites/OfficeofEqualOpportunity to learn more. Note the site provides a page for Title IX and a page for Discrimination and Harassment. Each page contains a report form that you may utilize to report concerns of sexual violence, relationship violence, stalking, sexual harassment, or protected category based discrimination and harassment. (The associated form indicates that it "is unlawful to retaliate against a student, employee or any other person affiliated with the University for filing a complaint or for cooperating in an investigation of a complaint."). To learn more about Title IX please visit: https://www.bridgew.edu/office/titleix. The Sexual Violence Advocacy and Support Center is a *confidential* support resource for all community members who have experienced sexual, gender-based, or relationship violence and stalking. Students seeking support can fill out this form: SVAS Center Support Form (maxient.com)

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