

### Course Policies and Information

<b>Objective</b>	The primary objective of this course is to explore the mathematical, scientific, and engineering foundations of sound and music. Broad topic areas include the basic concepts of acoustics, the human perception of sound, how various types of musical instruments work, the fundamentals of sound recording and reproduction systems, and the acoustics of performance spaces.		
<b>Textbook</b>	T. D. Rossing, R. F. Moore, and P. A. Wheeler, <i>The Science of Sound</i> , 3rd ed., Pearson New International Edition, Pearson Education Ltd., Essex, UK, 2014. ISBN-13: 978-1292039572. Supplemental readings will be posted to the course Moodle site.		
<b>Web Site</b>	<a href="https://www.eg.bucknell.edu/~dkelley/univ213">https://www.eg.bucknell.edu/~dkelley/univ213</a>		
<b>Prerequisite</b>	None, although the course is meant for students who are fascinated with how things work. Students should have a good understanding and affinity for algebra, trigonometry, and fundamental mathematical concepts such as functions, graphs, and summations.		
<b>Instructor</b>	Prof. David Kelley, Breakiron 368, 570-577-1313, <a href="mailto:dkelley@bucknell.edu">dkelley@bucknell.edu</a>		
<b>Communication</b>	Check your e-mail and the course web site at least <b>once per day</b> . Most announcements, assignments, study aids, and other course materials will be distributed via the web site or Moodle site. E-mail will be used occasionally to distribute time-sensitive announcements. You are responsible for knowing and adhering to any policies or policy updates posted at the web site.		
<b>Academic Responsibility</b>	You are expected to comply fully with the university's academic responsibility policies. Copying text or problem solutions, looking over a classmate's completed work, and other forms of plagiarism are not acceptable. I expect all submitted work to be your own. Deliverables produced for team exercises should be your group's own work. General discussions are okay, but sharing step-by-step instructions for solving a problem, sharing computer files, and direct copying are not. Refer to the "Academic Responsibility at Bucknell" web site ( <a href="http://www.bucknell.edu/x1324.xml">www.bucknell.edu/x1324.xml</a> ) or see me if these policies are not clear.		
<b>Bucknell University Honor Code</b>	As a student and citizen of the Bucknell University community: <ol style="list-style-type: none"> <li>1. I will not lie, cheat, or steal in my academic endeavors.</li> <li>2. I will forthrightly oppose each and every instance of academic dishonesty.</li> <li>3. I will let my conscience guide my decision to communicate directly with any person or persons I believe to have been dishonest in academic work.</li> <li>4. I will let my conscience guide my decision on reporting breaches of academic integrity to the appropriate faculty or deans.</li> </ol>		
<b>Final Grade Computation</b>	Your final course grade will be computed as shown below. Significant extra credit opportunities are not likely to be provided. Exam dates will be posted at the course web site.		
	Classroom Conduct	5%	
	Performance Reflections	10%	
	Homework	10%	weighted equally; lowest score dropped
	Projects	20%	
	Exams #1, #2	25%, 5%	lower score weighted less than greater score
	Final Exam	25%	

Scores on major assignments will not be discussed until a 24-hour "cooling off" period has passed unless points have been added incorrectly to obtain an overall score. An absolute scale with the following distribution will be used to determine your final course grade.

93-100	A	87-89.9	B+	77-79.9	C+	60-69.9	D
90-92.9	A-	83-86.9	B	73-76.9	C	< 60	F
		80-82.9	B-	70-72.9	C-		

**Conflicts, Special  
Accommodations,  
Lateness, and  
Attendance Policies**

If you know that you will not be able to complete an assignment by its deadline or take an exam at its scheduled time, you must notify me **at least 48 hours in advance** in order to avoid an automatic 5% score reduction on the assignment unless extenuating circumstances apply. Official university commitments such as recitals, field trips, and athletic events will normally be accommodated, as will job interviews, religious observances, and extraordinary personal opportunities. However, in accordance with university policy, conflicts due to personal travel plans under your control, especially around recesses and exams, will not be accommodated.

If you miss an exam, a major deadline, or other major activity due to illness, you must contact me as soon as possible, preferably before the activity, and then visit Student Health Services or another health care provider for an evaluation. If a health professional confirms the seriousness of your illness, your absence and/or missed deadline will be excused. In the case of an exam, a make-up opportunity will be arranged.

Unexcused absences or missed deadlines (e.g., due to oversleeping) will be handled on a case-by-case basis, usually in consultation with the appropriate associate dean. If you arrive late to an exam, you must complete it in the remaining allotted time. If you miss all or part of an exam due to an unexcused absence, you must notify me as soon as possible. Depending on the reason for the absence, a make-up opportunity of some kind *might* be offered for the first unexcused absence. Further unexcused absences will likely result in a score of zero for the exam or assignment.

A 20% score reduction will be imposed for work submitted up to 24 hours after the deadline and a 50% reduction 24–48 hours after the deadline unless otherwise stated in the assignment. No credit will be given for work submitted after 48 hours. No homework will be accepted after the solutions have been posted; this supersedes the partial credit allowances for lateness. If homework is due in class and you forget to bring it, it will be accepted without penalty if it is submitted as soon as possible without missing other classes or labs. Other exceptions will be made only for serious extenuating circumstances.

Additional policies might be posted at the course web site. If so, they will be announced in class and on the main web page. You are responsible for knowing and adhering to any posted policies.

On “normal” lecture days (i.e., those with no exams or group assignments), the decision to come to class is your responsibility. Although attendance at lectures is not specifically required for this course, I do notice when you are missing. If you struggle in the course, I will point to your absences as a likely cause. I frequently cover topics or details in class that are not included in the textbook. There will also be occasional in-class exercises that, although not directly applicable to your course grade, could be very helpful in your efforts to comprehend the course material.

I support the right of every student to define their own identity. If you have a preference for a specific set of pronouns and other forms of address, please let me know.

If you have or develop a medical condition or a documented or suspected learning disability that might have an impact on your work in this course and for which you might require an accommodation, please contact me privately as soon as possible. Also contact Ms. Heather Fowler, Director of the Office of Accessibility Resources (570-577-1188 or hf007@bucknell.edu).

**Homework Policies**

The primary purpose of homework is to help you master the concepts presented in the course. I encourage you to work on homework in groups and to help each other understand the material within the scope of the “Academic Responsibility” section above. However, the less you rely on a study group to complete your assignments, the more effectively you are likely to learn the material. Ultimately, you need to make sure that you can solve exam problems, respond to discussion prompts, and complete other problem-solving tasks on your own.

Homework must be submitted by the indicated deadline. Place your name, the course number (UNIV 213), and the homework number at the top of the first page, place the page number at the top of each subsequent page, and staple all pages together. You do not have to use a cover page. Where appropriate, clearly mark your answers by enclosing them in boxes. Use only one side of the paper, and trim the fringe pieces if you use paper torn from a spiral notebook. Problem responses must appear in the order in which they are listed on the assignment. Lack of compliance with one or more of these requirements could result in a score reduction. Sloppy or unreadable

homework is unacceptable and could result in a score of zero. A subset of the problems might be selected for grading if the assignment is especially long. Assignments will be posted at the course web site, and solutions will be posted at the course Moodle site.

**Classroom  
Conduct**

Since part of the educational mission of Bucknell is to prepare you for professional practice, conduct in the classroom comprises a portion of your course grade. Everyone in the classroom must act in a professional manner. Distractions that prevent your classmates from concentrating on instructional activities will not be tolerated. These include reading newspapers or other noisy print media, web browsing, texting messages, disruptive eating, excessive talking, chronic tardiness, and other inappropriate behavior. If you have a valid reason for being late every day or leaving the room during class time, please notify me as soon as possible.

Smart/cell phones, laptops, and other electronic devices other than non-wireless calculators may not be used in class without prior permission, although smart phones or silent cameras may be used briefly to take pictures of the whiteboard. Tablet PCs and tablet-like devices may be used to take notes in class if they are kept flat on the table; however, their use could be disallowed as well if they become a distraction.

Use of prohibited substances and/or possession of associated paraphernalia in class will result in a 1-point drop in the Classroom Conduct score per incident and referral to the appropriate associate dean.

**Time Commitment**

Time allotted to coursework outside of class is guided by the Bucknell University expectations for academic engagement: "Courses at Bucknell that receive one unit of academic credit [like UNIV 213] have a **minimum** expectation of 12 hours per week of student academic engagement. Student academic engagement includes both the hours of direct faculty instruction (or its equivalent) and the hours spent outside of class on student work." In this course, during some weeks the work load could be greater than average, some weeks less, but it should average **at least** 9 hours per week beyond class time. That means that every now and then you might have to commit 9 to 10 hours or more to this course outside of class in one week. You should plan on devoting a significant amount of time each week toward completing the assigned reading.

**Advice for Success**

Attend all lectures and keep up with the reading. Homework assignments will sometimes cover material discussed as little as two days before the due date since I will assume that you have completed the assigned reading before coming to class. Start homework assignments early.

You **must** read the textbook. My lectures are not a replacement for the assigned readings but instead are meant to add value to them and hopefully explain the more challenging portions. After many years of teaching, I have observed that students who do not read the textbook tend to struggle significantly with course material. The textbook fills in the details that I do not have time to cover in class and provides valuable reinforcement of the lecture topics.

Homework and other out-of-class activities are for your benefit. Take advantage of the opportunity to practice solving problems on your own to improve your learning and retention. Choose active studying over passive studying. Instead of simply reading the examples given in the textbook or in class, work out at least some of them yourself. Your primary concern should be to understand the concepts and solution techniques presented in the course. Developing valid thought processes that lead to comprehension should be your goal. Arriving at the correct numerical answer is of secondary importance.

Please see me if you are struggling with any aspect of the course. If you think that you might be dealing with test anxiety, you should review the resources available on the Exams page at the course web site. These resources have been prepared by professional counselors and educators and comprise a rich and proven collection of advice for managing test anxiety. You should also consider consulting Bucknell's Counseling & Student Development Center (570-577-1604).