Instructor
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Phone: 422-6461
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Office hours: Tuesday 1-4 or by appointment

**Blackboard**
This semester we will be using a web-based application called Blackboard. This is a required component of the course. To access it you will need a computer and a current web browser. All campus computer labs provide this level of technology. This program will allow you to take quizzes, review lecture materials, post information about yourself, learn about other students in the class, participate in discussion groups, and more. You can access this by going to Route Y.

**Prerequisites**
A good understanding of the material from ASLP 320 (speech anatomy and physiology) and Physics 167 (acoustics of music and speech) is absolutely necessary to your success in this course. If you did not take these prerequisites, please drop this class and take them before registering for this course next year. This semester’s work will build on the foundation provided by the prerequisite courses and will not involve re-teaching of what you should already know.

**Course Objectives**
The goal of this course is to familiarize you with ways of objectively measuring clinically relevant parameters of speech and voice. Speech-language pathologists can serve their clients better and provide quantitative evidence of the effectiveness of their treatment if they are competent in applying modern technology in a clinical setting. Computers are all around us, and it is in your personal and professional interest to learn to use them effectively. The material in this course will cover more advanced research instrumentation as well as the more basic clinical tools so that you will be better able to understand the papers published in our professional journals.

**Required Text**
*Do not be alarmed by the size and complexity of this text!* We will focus in class on the most salient sections.
Examinations and Quizzes
The two mid-term exams will cover material presented in the first and second portions of the course respectively. The final will be cumulative, although the focus will be more on material from the latter part of the semester. All examinations will be taken in the Testing Center.

Ten open-book quizzes will be given throughout the semester, and will allow you to gauge how well you are progressing with this material. They will cover material from the textbook that we will not have time to cover in detail in class. These quizzes will be administered using the Blackboard system, allowing you to take them on-line. If you fail to take one by the due date, it will no longer be available, and you will have missed the credit for that quiz. If your web connection crashes while you are taking the quiz, please email me so that I can re-set the quiz to let you try again.

As a student at Brigham Young University, you are expected to uphold the highest standards of integrity. With regard to exams and quizzes, this means that you work entirely alone, and agree not to disclose to others any information about the exam or quiz you may have already taken, which they are about to take.

Research Project
Equipment will be made available for you to gain experience in using modern speech analysis software on your own or another computer. You will record samples of your own speech and make acoustic measurements. More details will be provided in class.

Learning your names
I am going to try to learn all of your names, although with a big class, this may take a while. 5% of your grade will be dependent on the following three things. First, either I or my assistant will video tape you saying your name, where you are from, and one interesting thing about you. I will use this tape to associate names and faces (it’s amazing how little the university class roll pictures resemble most students!). Secondly, you will need to post some information about yourself on the Blackboard web site. Be creative here, but consider such things as where you come from, what motivated you to get into this field, what your career ambitions are, your family, your hobbies and interests, a favorite joke or anecdote, etc. Finally, you will need to look at the information posted by the 5 students who follow you alphabetically and send me an email describing something you learned about them.

Grading
The two midterm examinations will be worth 20% each of the course grade and the final will count for 25%. The open-book text-based quizzes will contribute 15% to your overall grade. The mini research project will contribute 15%. The final 5% will be given for the video and web introduction exercise mentioned above.
### Class Schedule
(subject to change... this is just the plan 😊)

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Topic</th>
<th>Reading</th>
<th>Read</th>
<th>Skip</th>
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<tbody>
<tr>
<td>January</td>
<td>7</td>
<td>introduction to speech science</td>
<td>Ch1</td>
<td>all</td>
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<tr>
<td></td>
<td>9</td>
<td>analog electronics</td>
<td>Ch2</td>
<td>6-10</td>
<td>11-15</td>
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<td></td>
<td>14</td>
<td>analog electronics</td>
<td>Ch2</td>
<td>16-19;32-34</td>
<td>20-31</td>
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<td></td>
<td>16</td>
<td>digital systems</td>
<td>Ch3</td>
<td>36-40;50</td>
<td>41-49</td>
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<td></td>
<td>21</td>
<td>holiday - no class</td>
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<td></td>
<td>23</td>
<td>general purpose tools</td>
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<td>24</td>
<td><strong>Thursday class</strong> gen. purpose tools</td>
<td>Ch4</td>
<td>54-81</td>
<td>82-91</td>
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<td>28</td>
<td>general purpose tools</td>
<td>Ch4</td>
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<td></td>
<td>30</td>
<td>exam 1 (Wed 30 and Thu 31 Jan)</td>
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<tr>
<td>February</td>
<td>4</td>
<td>speech intensity</td>
<td>Ch5</td>
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<td></td>
<td>6</td>
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<td>Ch5</td>
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<td></td>
<td>11</td>
<td>intensity / fundamental frequency</td>
<td>Ch5, Ch6</td>
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<td></td>
<td>13</td>
<td>fundamental frequency</td>
<td>Ch6</td>
<td>all</td>
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<td>18</td>
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<td>25</td>
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<td>Ch6</td>
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<td>27</td>
<td>spectrography</td>
<td>Ch7</td>
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<td>Ch7</td>
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<td>exam 2 (Mon 11 and Tue 12 Mar)</td>
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<td>Ch8</td>
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<td>20</td>
<td>air flow and volume</td>
<td>Ch9</td>
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<td>25</td>
<td>air flow and volume</td>
<td>Ch9</td>
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<td>laryngeal function</td>
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<td>laryngeal function</td>
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<td>8</td>
<td>velopharyngeal function</td>
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<td>10</td>
<td>speech movements</td>
<td>Ch12</td>
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<td></td>
<td>17</td>
<td>special topics</td>
<td>Ch12</td>
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Preventing Sexual Harassment
Title IX of the Education Amendments of 1972 prohibits sex discrimination against any participant in an educational program or activity receiving federal funds. The act is intended to eliminate sex discrimination in education. Title IX covers discrimination in programs, admissions, activities, and student-to-student sexual harassment. BYU’s policy against sexual harassment extends not only to employees of the university but to students as well. If you encounter unlawful sexual harassment or gender based discrimination, please talk to your professor; contact the Equal Employment Office at 378-5895 or 367-5689 (24-hours); or contact the Honor Code Office at 378-2847.

Students With Disabilities
Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability, which may impair your ability to complete this course successfully, please contact the Services for Students with Disabilities Office (378-2767). Reasonable academic accommodations are reviewed for all students who have qualified documented disabilities. Services are coordinated with the student and instructor by the SSD Office. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures. You should contact the Equal Employment Office at 378-5895. D-382 ASB.