Instructor: Michael VanLue, Ph.D., CCC-SLP  
Office: Masters Family Speech and Hearing Clinic, Children’s Hospital of Wisconsin  
Office Hours: By appointment  
Phone: 414-266-5634 office  
Email: michael.vanlue@marquette.edu

Course Description: This course will expose students to a variety of assessment and treatment factors involved in the multidisciplinary care of patients with cleft lip/palate and craniofacial conditions. There will be a particular focus on the speech-language and hearing issues. In addition to lectures from the primary instructor and guest speakers, there will be an instrumentation lab session that allows students experience with Nasometry, pressure-flow methodology, and flexible videonasoendoscopy. Students are expected to synthesize and apply course content to the case studies presented in class.

Required Texts:

Supplemental Readings will be posted on D2L or handed out in class. Students are expected to read the assigned chapter (and any additional reading materials) prior to each class meeting. A PDF of the PowerPoint slides and any handouts will be posted on the D2L in advance of each class. Students are encouraged to download and print these prior to each class meeting.

Helpful Websites:
- NCHPEG Website: Students will be required to complete all modules of this website tutorial about genetics in speech-language pathology and audiology [http://www.nchpeg.org/shla/site.html](http://www.nchpeg.org/shla/site.html) including reviewing the (1) syndrome identification module, (2) family history module, (3) the Genetics Primer, and (4) the website slideshow at [http://www.nchpeg.org/shla/resources/Introduction_to_Genetics_for_SLPA.pdf](http://www.nchpeg.org/shla/resources/Introduction_to_Genetics_for_SLPA.pdf). This information will be on the midterm and final exams.
- The Cleft Palate Foundation (CPF) [www.cleft-line.org](http://www.cleft-line.org) is a 501(c)(3) nonprofit organization whose mission is to enhance the quality of life for individuals affected by cleft lip and palate and other craniofacial birth defects. CPF was founded by the American Cleft Palate-Craniofacial Association in 1973 to be the public service arm of the professional Association.
- *Feeding Your Baby* will give you the facts you need to feed a baby with a cleft. Whether you are a new parent or caregiver, a doting relative or a health care professional, this video will guide you through the special techniques and bottles to help create an enjoyable, satisfying and productive feeding experience for a baby with a cleft palate. [http://www.cleftline.org/parents-individuals/feeding-your-baby/](http://www.cleftline.org/parents-individuals/feeding-your-baby/)

- *Parameters for Evaluation and Treatment of Patients with Cleft Lip/Palate or Other Craniofacial Anomalies* American Cleft Palate-Craniofacial Association; Revised 2009

**ASHA Knowledge and Skills Acquisition (KASA) Standards Met by This Course**

Standard III-B: The applicant must demonstrate knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases.

Standard III-C: The applicant must demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including the etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates.

Standard III-D: The applicant must possess knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates of the disorders.

Standard III-E: The applicant must demonstrate knowledge of standards of ethical conduct.

Standard III-G: The applicant must demonstrate knowledge of contemporary professional issues.

**WI-DPI Standards**

Satisfactory completion of this course is intended to assist students in meeting the following requirements for WI-DPI Licensure in Speech-Language Pathology:

DPI knowledge and skills standards: 1, 5, 6, 8, 10.

1. The speech-language pathologist (SLP) understands the central concepts, tools of inquiry, and structures of the disciplines s/he teaches and can create learning experiences that make these aspects of subject matter meaningful for pupils.

5. The SLP uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

6. The SLP uses effective verbal and nonverbal communication techniques as well as instructional media and technology to foster active inquiry, collaboration, and supportive interaction in the classroom/therapy room.

8. The SLP understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the pupil.

10. The SLP fosters relationships with school colleagues, parents, and agencies in the larger community to support pupil learning and well being and acts with integrity, fairness and in an ethical manner.
Course Goals and Objectives:

- Describe the anatomic/medical, behavioral/physiologic, and psychosocial contributors to speech-language and hearing disorders in cleft/craniofacial populations.
- Explain the purpose, clinical methods, and potential artifacts of common clinical instruments used with these populations.
- Demonstrate entry-level competence in making auditory-perceptual judgments of resonance.
- Determine the potential etiologies and comorbid factors associated VPD and resonance disorders.
- Integrate knowledge of cultural differences into knowledge about speech disorders, cleft palate and craniofacial anomalies, and role of disease/medical intervention.
- Students will demonstrate knowledge and competency in the assessment and treatment of typical communication disorders in cleft/craniofacial populations by designing a diagnostic and treatment plan, given a mock referral and patient history.
- Demonstrate appropriate components of a diagnostic evaluation using case based examples of VPI/cleft palate and resonance disorders including informal assessment of resonance and articulation (speech sample, nasal flutter, See-scape, etc.).
- Design a treatment program suitable for a select population (e.g. children, syndromic populations, etc.) including articulation therapy for “cleft palate speech,” identification and description of aural rehabilitation strategies for use at home and in the classroom, and speech therapy for resonance disorders, including therapy with biofeedback (e.g. Nasometry).
- Explain the role of genetics in conditions that they may encounter in the clinical setting and describe the etiology of a number of some genetic syndromes involving clefting and communication disorders.
- Discuss the psychosocial impact of craniofacial conditions on the family and identify appropriate counseling technique and resources.

COURSE REQUIREMENTS, GRADING, AND ATTENDANCE

EXAMS

Two examinations. The midterm exam will be worth 30% of the course grade. The final exam will also be worth 30% of the course grade.

PROJECTS

Two projects. The first project will involve application of your knowledge about speech disorders in children with cleft palate/VPI and design of an appropriate speech treatment plan for an assigned case. The first project will be worth 15% of the course grade. The second project will involve researching a syndrome or craniofacial condition of interest, and providing the class with a 1-2 page handout and 10 minute oral presentation about the syndrome/condition. A list of references will also be required. The second project will be worth 25% of the course grade.
Suggested Syndromes/Conditions:

- Velocardiofacial/DiGeorge syndrome (22q11.2 deletion syndrome)
- Oculo-auriculo-vertebral spectrum (OAV, Hemifacial Microsomia, Goldenhar syndrome)
- Treacher Collins syndrome (Mandibulofacial Dysostosis)
- Stickler syndrome
- Pierre Robin Sequence
- Van der Woude syndrome
- Nager Syndrome
- Apert syndrome
- Crouzon syndrome
- Neurofibromatosis, Type I
- Fetal alcohol syndrome
- Saethre Chotzen syndrome
- Myotonic dystrophy
- Moebius syndrome
- VPD in ALS, post-TBI, post-VVA, or in adults with head/neck cancers
- Other syndromes/conditions subject to instructor approval

GRADING
All examinations and presentations will be converted to percentages. Final scores will be computed from the percentage weightings shown above and converted to letter grades as follows: A (93-100), AB (88-92), B (83-87), BC (78-82), C (73-77), CD (68-72), D (60-67), F (59 and lower).

Formative Assessment: Throughout the term, students will conduct a variety of learning activities designed to assess progress in obtaining knowledge and skills in these disorders and practice areas. Activities will be conducted individually and in cooperative learning groups. Examples include:

- Short assignments to illustrate concepts or procedures
- Playing group games in class to check recall of important details
- One minute papers to quiz your understanding of pathologies, surgeries, and disorders
- Role playing various assessment and treatment techniques

ATTENDANCE

Attendance at all class meetings is expected. Exams missed because of an excused absence must be taken within a week of your return to class. The memorandum “SPPA Departmental Policy for make-up Examinations,” details what qualifies as an excused absence. Exams missed for discretionary (non-excused) reasons must also be taken within a week of your return to class. A 10 point deduction will be applied to exams missed for discretionary reasons. It is expected that students take exams on the dates scheduled by their instructors. Exceptions will be made for certain ANTICIPATED ABSENCES and true EMERGENCIES.

Definition of excused absence for SPPA exams:
Acceptable anticipated absences:

- The student is away from campus representing an official university function, e.g., participating in a professional meeting, as part of a judging team, or athletic team.
- Required court attendance as certified by the Clerk of Court.
- Religious observances when certified by a letter from the student’s parent(s) or religious leader.
- Required military duty as certified by the student’s commanding officer.

Acceptable emergency absences:

- Illness or injury when certified by an attending physician, dentist, or nurse. The certification should show the date service was provided to the student but should not describe the nature of that service.
- Death or serious illness in the immediate family (parents, step-parents, siblings, spouse, children, step-children, foster children, in-laws, sibling in-laws, grandparents, great grandparents, step-great grandparents, grandchildren, aunts, uncles, nieces, and nephews) when certified by a letter from the student’s parent(s) or spouse.

Please note that the student is required to provide verification of the absence to the course instructor. Missing exams for DISCRETIONARY reasons (e.g., weddings, vacations) is STRONGLY DISCOURAGED. Students who request a make-up examination for discretionary reasons may receive a grade penalty or be asked to or fulfill an additional course requirement, at the discretion of the instructor. Examples of these penalties or requirements may include a grade reduction on the missed exam. As part of your professional preparation, and as a courtesy to your faculty and fellow students, it is expected that you honor your academic commitments. A student may appeal in writing to the Department Chair to obtain an excused absence for missing an exam due to circumstances other than those specified above.

### COURSE TOPICS/OUTLINE

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assigned Reading (DUE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/20/13</td>
<td>Syllabus/Course Overview</td>
<td>Ch. 1 and 2, ACPA Parameters,</td>
</tr>
<tr>
<td></td>
<td>Introduction to CLP, Team Care/Roles</td>
<td>Complete NCHPEG tutorial;</td>
</tr>
<tr>
<td></td>
<td>Genetics, Embryology</td>
<td>WHO Document</td>
</tr>
<tr>
<td>05/22/13</td>
<td>Anatomy/Physiology Review</td>
<td>Ch. 3 and 6</td>
</tr>
<tr>
<td></td>
<td>Hearing and ENT issues</td>
<td>Kuehn and Moller (2000)</td>
</tr>
<tr>
<td></td>
<td>Dental/Orthodontic Considerations</td>
<td>Ch. 5</td>
</tr>
<tr>
<td>05/27/13</td>
<td>Memorial Day (no class meeting on this date)</td>
<td></td>
</tr>
<tr>
<td>05/29/13</td>
<td>Feeding/Swallowing/Airway Issues</td>
<td>Cleft Palate Foundation:</td>
</tr>
<tr>
<td></td>
<td>Surgical Management</td>
<td>Feeding Your Baby-Video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ch. 4</td>
</tr>
</tbody>
</table>
06/03/13  Prelinguistic Assessment/Intervention  Chapter 7
Speech-Language Disorders in CLP
Peterson-Falzone p. 1-7, 105-116
Scherer et al. (2008)
Hardin-Jones & Chapman (2008)

06/05/13  Articulation Disorders in CLP  Ch. 8
Non-cleft causes of VPI
Peterson-Falzone p. 17-38

06/10/13  MIDTERM EXAM

06/12/13  Perceptual Speech Evaluation in CLP  Ch. 9
Oral Examination, Case History,
Evaluation of Language Skills
Henningsson et al. (2008)
Ch. 10
Instrumental Assessment of Speech
ASHA Endoscopy statements
Working Group (1990)

06/17/13  Articulation Therapy in CLP  Ch. 11
Biofeedback Therapy
Golding-Kushner p. 5-12
Surgical and Prosthetic Management of
Peterson-Falzone p. 163-177
Velopharyngeal Inadequacy
Ch. 12
Mgmt of non-cleft VPI in adults
Moller and Starr p. 145-180
Sloan (2000)

06/19/13  Psychosocial and Education Issues  Ch. 13
TREATMENT PLAN PROJECT DUE
Ethics, Counseling, and Cultural Issues
Klein et al., 2006
Family Support/Resources
Aspinall (2002) and (1995)

06/24/13  Catch up
SYNDROME PRESENTATIONS
SYNDROME HANDOUT DUE

06/26/13  FINAL EXAM