



**College of Education and Human Development
Division of Special Education and disAbility Research**

Fall 2016

EDSE 513: Medical and Educational Implications of Visual Impairments

3-Credits

GMU Section DL1; CRN: 77979

GMU Section 6V1; CRN: 82434

GMU Section 6Y1; CRN: 82437

Instructor: Dr. Kimberly Avila	Meeting Dates: 08/29/16 - 12/09/16
Phone: 703.993.5625	3Meeting Day(s): Monday
E-Mail: kavila@gmu.edu	Meeting Time(s): 4:30 pm - 7:10 pm
Office Hours: By appointment and before/after class	Meeting Location: NET

***Note:** This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.*

Course Description

Provides an introduction to anatomy and physiology of the visual system and the educational implications of visual pathology. Topics include anatomy of the human eye, normal visual development, pathology of the eye, examination procedures for the identification of visual pathology, and the effects of pathology on visual learning and development.

Prerequisite(s): EDSE 511 (may be taken concurrently).

Notes: Delivered online.

Schedule Type: LEC

Hours of Lecture or Seminar per week: 3

Hours of Lab or Studio per week: 0

Prerequisite(s): EDSE 511 (may be taken concurrently)

Co-requisite(s): None

Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

Advising Tip

Did you know that Mason email is the primary method of communication used by university offices including those arranging internships, reviewing records for graduation, etc.? Check your Mason email regularly or use the instructions at <http://masonlive2.gmu.edu/tutorials/forwardemail.cfm> to forward to an email account you check frequently.

Nature of Course Delivery

Learning activities include the following:

1. Class lecture and discussion
2. Application activities
3. Small group activities and assignments
4. Video and other media supports
5. Research and presentation activities
6. Electronic supplements and activities via Blackboard

DELIVERY METHOD:

This course will be delivered online using a primarily **synchronous** format via the Blackboard learning management system (LMS) housed in the MyMason portal. You will log in to the Blackboard course site using your Mason email name (everything before "@masonlive.gmu.edu) and email password. The course site will be available on 8/29/2016.

TECHNICAL REQUIREMENTS:

To participate in this course, students will need the following resources:

- High-speed Internet access with a standard up-to-date browser, either Internet Explorer or Mozilla Firefox. Opera and Safari are not compatible with Blackboard;
- Consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of the course requirements.

- The following software plug-ins for PCs and Macs respectively, available for free downloading by clicking on the link next to each plug-in:
 - Adobe Acrobat Reader: <http://get.adobe.com/reader/>
 - Windows Media Player: <http://windows.microsoft.com/en-US/windows/downloads/windows-media-player>
 - Apple QuickTime Player: www.apple.com/quicktime/download/
- A headset microphone for use with the Blackboard Collaborate web conferencing tool

EXPECTATIONS:

- **Course Week:** Refer to the asynchronous bullet below if your course is asynchronous or the synchronous bullet if your course is synchronous.
 - **Asynchronous:** Because online courses do not have a “fixed” meeting day, our week will **start** on **Monday**, and **finish** on **Sunday**.
 - **Synchronous:** Our course week will begin on the day that our synchronous meeting takes place as indicated on the Schedule of Classes.
- **Log-in Frequency:** Refer to the asynchronous bullet below if your course is asynchronous or the synchronous bullet if your course is synchronous.
 - **Asynchronous:** Students must actively check the course Blackboard site and their GMU email for communications from the instructor, at a minimum this should be 2 times per week.
 - **Synchronous:** Students must log-in for all scheduled online synchronous meetings. In addition, students must actively check the course Blackboard site and their GMU email for communications from the instructor, at a minimum this should be 2 times per week.
- **Participation:** Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- **Technical Competence:** Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance if they are struggling with technical components of the course. Contact ITU (<http://itservices.gmu.edu/help.cfm>) at (703) 993-8870 or support@gmu.edu.
- **Technical Issues:** Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- **Workload:** Expect to log in to this course **at least three times a week** to read announcements, participate in the discussions, and work on course materials.

Remember, this course is **not** self-paced. There are **specific deadlines** and **due dates** listed in the **CLASS SCHEDULE** section of this syllabus to which you are expected to adhere. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.

Netiquette: Our goal is to be **collaborative**, not combative. Experience shows that even an innocent remark in the online environment can be misconstrued. I suggest that you always re-read your responses carefully before you post them to encourage others from taking them as personal attacks. **Be positive in your approach to others and diplomatic with your words.** I will do the same. Remember, you are not competing with each other but sharing information and learning from one another as well as from the instructor.

Learner Outcomes

Upon completion of this course, students will be able to:

1. Demonstrate knowledge of the parts of the eye, their purposes, and functions.
2. Describe the process of vision and the workings of the visual pathway.
3. Describe the stages in typical development of the human visual system.
4. Demonstrate an understanding of basic optics and common refractive errors.
5. Demonstrate knowledge of common visual disorders and their impact on learning.
6. Interpret eye reports and other information related to visual impairments, including the clinical low vision evaluation report, information from families, and educational and related service providers.
7. Conduct, interpret and apply the results of formal and informal assessments of functional vision.
8. Use information from functional vision evaluations to develop recommendations for the student's learning environment and educational materials.
9. Identify instructional strategies to increase visual access and efficiency to and within learning environments as related to instruction in the use of print adaptations and optical and non-optical devices.
10. Demonstrate an understanding of low vision aids and training methods.

Required Textbooks

Corn A.L., Erin J.N. (Eds) (2010) Foundations of low vision: Clinical and functional perspectives (2nd ed). New York: AFB Press.

[FVLMA Kit: Functional Vision and Learning Media Assessment](#) Available from APH

FVLMA Web application (at no additional cost) <https://tech.aph.org/fvlma/auth/login>

Recommended Textbooks

Koenig, A. J., & Holbrook, M. C. (1994) Learning Media Assessment of Students with Visual Impairments: A Resource Guide for Teachers (2nd ed.). Austin, TX: Texas School for the Blind and Visually Impaired. TSBVI Order # 59422LVP.

Levack, N. (1995). Low Vision: A Resource Guide with Adaptations for Students with Visual Impairments (2nd ed.). Austin, TX: Texas School for the Blind and Visually Impaired. TSBVI Order # 59423LMP.

Lofting, M. (2006). Making Evaluation Meaningful: Determining Additional Eligibilities and Appropriate Instructional Strategies for Blind and Visually Impaired Students. TSBVI Order # 59443MEM.

Lueck, A. H. (2004). Functional Vision: A Practitioner's Guide to Evaluation and Intervention. New York: AFB Press. ISBN 978-0-89128-871-8

Smith, A. J., & O'Donnell, L. M. (1991). Beyond Arm's Reach: Enhancing Distance Vision. Pennsylvania College of Optometry Press. ISBN B0006QSJ1U. While this text is out of print, it is still available directly from Salus University in Elkins Park, PA. Contact: Tracey Robbins at 215-780-1359.

Additional Readings

Posted on Blackboard

Course Relationships to Program Goals and Professional Organizations

This course is part of the Virginia Consortium for Teacher Preparation in Vision Impairment Program for teacher licensure in the Commonwealth of Virginia in the special education areas of Special Education: Visual Impairments PK-12. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization. The CEC standards that will be addressed in this class include Standard 1: Learner development and individual learning differences; Standard 3: Curricular content knowledge; Standard 4: Assessment; Standard 5: Instructional planning and strategies.

GMU Policies and Resources for Students:

a. Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/the-mason-honor-code/>].

- b. Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>].
- c. Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
- e. Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services and inform their instructor, in writing, as soon as possible. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor. [See <http://ods.gmu.edu/>]. Students from other Consortium universities must provide their accommodation documentation to the instructor as well.
- f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times.

Core Values Commitment

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See <http://cehd.gmu.edu/values/>]

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>]

Course Policies & Expectations

Attendance.

Attendance in every class session is required and will be taken twice during each synchronous class meeting (at the beginning and at another unannounced point in each session). Activities in class are planned in such a way that they cannot easily be recreated outside of the class session. Live lectures, activities, and guest speakers supplement the textbook and can only be experienced in class. Furthermore, as part of this course you are expected to be an active and respectful participant, which includes engaging in class discussions and activities. Only in the event of an emergency or serious illness will one class absence be excused with the opportunity to make up participation points.

Late Work.

Due to the rapid nature of this course, no late assignments will be accepted unless prearranged with the instructor or if there is a documented medical or family emergency.

- Assignments are due by the dates posted in the schedule.
- Assignments (including interactive responses) are due by 11:59 PM on the posted date.
- All times referenced in this course are East Coast Times.
- Check the Assignment Due Dates posted in Blackboard as the Course Schedule is Subject to Change.

Tk20 Performance-Based Assessment Submission Requirement

Every student registered for any Special Education course with a required performance-based assessment is required to submit the *Instructional Plan and Intervention Project* to Tk20 through Blackboard (regardless of whether the student is taking the course as an elective, a onetime course or as part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in Tk20 through Blackboard. Failure to submit the assessment to Tk20 (through Blackboard) will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Tk20 submission, the IN will convert to an F nine weeks into the following semester.

Grading Scale

A = 95-100%

A- = 90-94%

B = 80-89%

C = 70-79%

F = 70% and below

Assignments

Performance-based Assessment (Tk20 submission required).

Task	Points Possible	Due
Participation and Interactive Responses (14 weeks, 5 points each week)	70	Weekly
Report and Presentation: Conditions that Cause Blindness and Visual Impairment	30	9/26/2016
Functional Vision Assessment Kit	35	10/17/2016
Functional Vision Assessment	100	11/14/2016
Low Vision Instructional Plan and Intervention Project	100	11/28/2016
Total	335	

Performance-based Common Assignments (No Tk20 submission required).

Other Assignments.

Participation and Interactive Responses (14 weeks, 5 points each week = 70 points total): Each week, interactive content will be presented. This includes discussions (whole class, group, discussion board posts) written or verbal responses required online or in class, and tasks assigned individually or in groups/pairs. “Quiz” type questions will be asked through Blackboard on certain weeks that will assess anatomy of the eye, conditions affecting vision, functional vision considerations, medical reporting, vision report interpretations, and other content presented in this course.

Candidates are required to be present in each class and to submit or participate in each week’s content and assigned tasks to obtain these points.

Report and Presentation: Conditions that Cause Blindness and Visual Impairment (30 points). Each candidate will create a presentation on an assigned vision condition

that causes blindness and visual impairment. Presentations should last between 5-7 minutes and include:

- A definition of the diagnosis
- A description of the parts of the eye/visual system that are impacted and how the diagnosis is different from typical vision
- A description of the condition: congenital, adventitious, how it progresses, which populations are at greater risk, etc.
- Basic genetic information, if applicable
- Any data/statistics available on the prevalence of the condition in the U.S. and globally
- Typical prognosis of the diagnosis (Stabilizes, non-progressive, degenerative, etc.).
- The impact on functional vision
- List of resources for persons diagnosed with this condition and for parents/family members, teachers, and other service providers

Your report must include:

- Precise terminology and information
- Citations from peer reviewed, scholarly sources
- Respectful and person first language

Rubric: Vision Condition Presentation

Item	Unsatisfactory	Satisfactory	Exemplary
10 pts Dx description: definition, anatomy and physiology that is affected, typical progression/prognosis, at risk populations and statistics for U.S. and globally included for vision condition. Genetic information is included on relevant genetic conditions.	<6 One or more of these required elements are omitted. Inaccurate information is provided on any of the descriptive elements of the vision condition.	7-9 Each element required for the vision condition are provided and accurately described.	10 Thorough and accurate descriptions of each element are clearly provided. Supplemental graphics, descriptions, charts, tables or other explanations are included to convey this information.
10 pts Implication of functional vision	<6 Omits or poorly defines how functional vision is affected. Omits or inaccurately defines areas of	7-9 Clearly defines which functional vision constructs are affected and the implications for the individual.	10 Clearly defines which functional vision constructs are affected and the implications for the individual.

Item	Unsatisfactory	Satisfactory	Exemplary
	functional vision that may require consideration.	Provides accurate suggestions to accommodate functional vision needs.	Provides optimal and ample options to accommodate functional vision needs. Includes multiple resources for working with students who have these functional vision considerations; Provides additional information on the impact on vision, including pictures, graphics, and/or in-depth descriptions.
5 pts Resources for persons diagnosed with this condition and for parents/family members, teachers, and other service providers	<3 pts Resources are omitted or less than two. Resources are not relevant or specific to the visual impairment. Description of resources are inaccurate, partial or not provided.	4 pts Three or more resources are provided; all are relevant and specific to the visual impairment. List is organized and contains a brief description of the resource.	5 pts More than 5 resources are provided for the visual impairment that are relevant and specific to the condition. List is organized and provided in a user-friendly manner for consumers/families to access. A succinct, but helpful description is provided for each resource.
5 pts Terminology, citations, language, writing and presentation	<3 pts Inaccurate terminology is used or needed terminology is omitted. Presentation language, writing, and, delivery are disorganized and unclear. Scholarly	4 pts Correct terminology is used throughout presentation; Presentation language, writing, and delivery is clear, coherent and well-conveyed to the	5 pts Presentation is captivating, easy to follow, and clear. Accurate terminology is provided throughout, with writing and language that are positive and

Item	Unsatisfactory	Satisfactory	Exemplary
	citations are not used on all or some of the citations, or citations are not provided. A reference list is incomplete or omitted.	audience; At least four scholarly citations are used throughout from accurate and relevant sources; all citations are referenced at the end of the slides or document.	respectful. At least six scholarly citations are used throughout from accurate and relevant sources; all citations are referenced at the end of the slides or document.

Functional Vision Assessment Kit (35 points). Assemble a functional vision assessment kit to utilize with your student that will take part in your FVA. Your FVA kit will include various items specific to your student and may include samples of toys, practical and clinical assessment tools, methods to assess glare/lighting considerations, depth perception, field of vision, visual behaviors and other elements of the FVA. Your kit document should also include brief information on the settings where you will conduct the FVA to assess visual functioning. For each item you include, or each setting you will use to conduct your evaluation, include a brief rationale/statement on what the item will be used for or in which setting will each vision skill be assessed. (Example: unfamiliar steps at the school will be used as part of the depth perception and navigation elements of the FVA.) An organized document with headings with a brief rationale for why you included items in the kit is required. Items that you want to include in the kit but are unable to purchase can be included. For suggested items to include in your FVA kit, refer to the *Looking to Learn* text and the APH FV/LMA appendix A.

Rubric: FVA Kit:

Items	Points possible
FVA kit document includes: headings for each construct of functional vision that will be included. Document is organized and clear to others.	2
Brief description of student this FVA would be used for. Specify: condition, age, grade/functional level	5
Age-appropriate items selected, described, pictured and/or linked in document	5
Items to assess the following are included:	15

Items	Points possible
Acuity, contrast, color, oculomotor function, fields of vision, lighting, visual response to objects, near, medial, distance visual stimuli, tracking items, optical devices when appropriate, etc.	
Brief description of settings where evaluation will take place and how considerations, such as depth perception, glare, lighting, etc. will be evaluated.	8
Total	35 points

Functional Vision Assessment (100 points). This is a field experience assignment. Each candidate must obtain a placement with a child who is visually impaired and conduct the FVA. Candidates must first observe the student, review relevant information about the student, discuss and interview teachers, family members/parents and other stakeholders about the student's visual functioning, assemble the FVA kit (assigned in this syllabus) and conduct the FVA in multiple settings, across different days. Candidates must write up the FVA report. Each school system may have a different format for FVA reporting, which may be used for this assignment. However, make sure to include all of the required elements. For those who are in school systems without a required FVA report format, please create your own based on course resources. Complete directions and rubric on Blackboard.

Low Vision Instructional Plan and Intervention Project (100 points).

Develop a low vision plan and intervention project based on the results of the functional vision assessment for a student with low vision. A detailed description of the assignment and rubric are posted on Blackboard. This project will be presented to the class.

Schedule

Subject to change based on class needs

Date	Tasks	Assignments and Readings
8/29/2016	<ul style="list-style-type: none"> • Course Overview • Blackboard • Assignments and Requirements • Introduction to the visual system • Basic terminology 	Reading: Corn & Erin (2010) Ch. 5 Additional readings on Bb.

Date	Tasks	Assignments and Readings
9/5/2016	Labor Day: Asynchronous Class <ul style="list-style-type: none"> • Development of the visual system • Anatomy and physiology of the eye • Vision v. sight 	Video: Lewis (2010) <i>Understanding vision development</i> Reading: Corn & Erin (2010) Chs. 5 and 9 Additional readings on Bb.
9/12/2016	<ul style="list-style-type: none"> • The visual system cont'd: • Congenital and adventitious vision conditions • Basic of genetics and hereditary vision conditions • Injuries and environmental/health related vision conditions • Ophthalmologist, optometrist, and other eye care professional reports/evaluations • Introduction to functional vision 	Reading: Corn & Erin (2010) Ch 6 Additional readings on Bb.
9/19/2016	<ul style="list-style-type: none"> • Clinical assessment of vision • Clinical Low Vision Evaluation • Clinical treatment of various vision conditions • Functional vision evaluations v. clinical vision assessments 	Reading: Corn & Erin (2010) Ch. 8 Essential Assessment http://earubric.com/ Additional readings on Bb.
9/26/2016	Presentations: <ul style="list-style-type: none"> • Conditions that Cause Blindness and Visual Impairment • Overview of the functional vision assessment: purpose, procedures, settings, and planning; customizing an FVA kit for each student 	DUE: Presentation on assigned vision condition Reading: Corn & Erin (2010) Ch. 10 FVA-APH: Appendix A FVLMMA Web application Additional readings on Bb.
10/3/2016	FVA Components: Color, contrast, lighting, visual fields, oculomotor function, and acuity	Reading: Corn & Erin (2010) Ch. 10 FVA-APH: pp. 33-93 Additional readings on Bb.

Date	Tasks	Assignments and Readings
10/10/2016	Asynchronous Class Week Optics Overview	Reading: Corn & Erin (2010) Ch. 7 Additional readings on Bb.
10/17/2016	Individuals with Visual Impairments Panel Discussion (tentatively scheduled) <ul style="list-style-type: none"> • FVA components cont'd: Practical assessment methods • FVA documentation and data recording • FVA: Report writing 	Due: FVA Kit Reading: Corn & Erin (2010) Ch. 13 Additional readings on Bb.
10/24/2016	<ul style="list-style-type: none"> • Instruction in visual techniques • Instructional techniques and accommodations for students with low vision 	Reading: Corn & Erin (2010) Chs. 11, 14, and 15 Additional readings on Bb.
10/31/2016	Asynchronous Class Week <ul style="list-style-type: none"> • Introduction to cortical/cerebral visual impairment (CVI) 	Reading: Perkins CVI CVI Range: Lantzy (2010) Lueck (2010) Lam et. al. (2010) Lantzy & Lantzy (2010) Additional readings on Bb.
11/7/2016	<ul style="list-style-type: none"> • CVI: assessment and instruction considerations • Developmental and educational considerations for children with low vision and CVI 	Reading: APH CVI CVI Range: Lantzy (2010) Lantzy (2007) Additional readings on Bb.
11/14/2016	Psychosocial aspects of blindness and visual impairment for individuals and families	Due: FVA Reading: Corn & Erin (2010) Ch. 3 Additional readings on Bb.
11/21/2016	Overview of adult-onset visual impairment: conditions and implications	Reading: Corn & Erin (2010) Ch. 21 Iskow (2010)

Date	Tasks	Assignments and Readings
11/28/2016	Presentations: Low vision instructional plan	Additional readings on Bb. Due: Low vision instructional plan
12/5/2016	Project and assessment feedback Course conclusion and evaluation	Additional readings on Bb.