

A minor in Multimedia Authoring requires the following courses:

ENG	212	Writing, Rhetoric and Interface Design	4 sh
CIS	310	Interaction Design for Web and Multimedia	4 sh
MMA	460	Multimedia Authoring Studio	4 sh
Eight hours of MMA electives from the following:			8 sh
ART	263	Digital Art I	
ART	363	Digital Art II	
BUS	304	Introduction to Marketing (No credit for both BUS 304 and BUS 311)	
BUS	311	Principles of Marketing (No credit for both BUS 304 and BUS 311)	
CIS	310	User-Centered Web Design	
CIS	320	Building Collaborative Environments	
CIS	325	Web Development	
ENG	311	Collaboration and Publications Management	
ENG	312	Visual Rhetoric and Document Design	
JCM	340	Audio Production	
JCM	345	The Art of Film and Video Editing	
JCM	364	Web Publishing and Design	
Or other approved elective			
TOTAL			20 sh

MMA 460. MULTIMEDIA AUTHORIZING STUDIO 4 sh

Students will develop an interactive, multimedia project which incorporates text with computer graphics, video and audio. This project will address a multimedia challenge in the student's major field of study or related field of interest. Students will be involved in developing their final products through each stage of the full project lifecycle, including research, planning, design, implementation and maintenance/reflection. Prerequisites: ENG 212, CIS 310 and 8 hours of MMA electives.

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Music

Chair, Department of Music: Associate Professor Futrell

Professors: Bragg, Erdmann, Fischer Faw

Associate Professor: Metzger

Assistant Professors: Buckmaster, Coleman, Hogan, Knight

Instructor: LaRocco

Professor Emeritus: Artley

Lecturers: Butler-Cornelius, Sawyer

Adjuncts: M. Bragg, Carter, Celona, Cykert, Dharamraj, Dollak, Dollar, Dula,

Henderson, Hill, Hopper, Newton, Novine-Whitaker

Artist-in-Residence: Metzger

The Department of Music at Elon University offers four music degrees. The B.S. in Music Education is for those students who wish to teach in elementary, middle or high school music programs. The program is a collaborative effort between the Department of Music and the Department of Education. The A.B. in Music Performance is for those students who wish to emphasize the study of instrumental or vocal music. Students in

this program will be expected to become accomplished performers while developing a solid base in theory and history. The B.S. in Music Technology is for students who wish to pursue a career in the music industry or academia in the field of music technology and synthesis. The A.B. in Music is primarily for those students who do not wish to concentrate on a performance area or who wish to double major in another liberal arts department. Students in this program will have a continuing background in musical performance through participation in ensembles and private lessons.

An audition is required for acceptance into this program.

A major in Music Education requires the following courses:

MUS	111	The Materials of Music I	3 sh
MUS	112	The Materials of Music II	3 sh
MUS	113	Aural Skills I	1 sh
MUS	114	Aural Skills II	1 sh
MUS	211	The Materials of Music III	3 sh
MUS	212	The Materials of Music IV	3 sh
MUS	213	Aural Skills III	1 sh
MUS	214	Aural Skills IV	1 sh
MUS	313	Form and Analysis	2 sh
MUS	315	The Music of Ancient Times Through Baroque	4 sh
MUS	316	Classic and Romantic Music	4 sh
MUS	361	Percussion Techniques	1 sh
MUS	362	Brass Techniques	1 sh
MUS	363	Woodwind Techniques	1 sh
MUS	364	String Techniques	1 sh
MUS	365	Choral Techniques	1 sh
MUS	366	Conducting	2 sh
MUS	411	Instrumental and Choral Arranging	2 sh
MUS	413	Twentieth Century Techniques	2 sh
MUS	461	Music Education in the Public Schools	4 sh

In addition, each Music Education major must complete:

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|--|-------|
| (a) Applied music lessons, at least one semester at 300 level | 12 sh |
| (b) Half-recital accepted by music faculty | |
| (c) Ensemble from Music 101, 102, 103, 105 and 109
(Instrumental majors must complete two semesters of MUS 109) | 8 sh |
| (d) Keyboard proficiency | |

Concert attendance and departmental recital attendance as outlined in the Music Student Handbook.

TOTAL **61 sh**

In addition, vocal majors must take MUS 258, Diction for Singers I and MUS 259, Diction for Singers II.

The music student must also complete the required professional education courses and observe the requirements for the teacher education program as outlined under Education.

An audition is required for acceptance into this program.**The major in Music Performance** requires the following courses:

MUS	111	The Materials of Music I	3 sh
MUS	112	The Materials of Music II	3 sh
MUS	113	Aural Skills I	1 sh
MUS	114	Aural Skills II	1 sh
MUS	211	The Materials of Music III	3 sh
MUS	212	The Materials of Music IV	3 sh
MUS	213	Aural Skills III	1 sh
MUS	214	Aural Skills IV	1 sh
MUS	313	Form and Analysis	2 sh
MUS	315	The Music of Ancient Times Through Baroque	4 sh
MUS	316	Classic and Romantic Music	4 sh
MUS	413	20th Century Techniques	2 sh
MUS	495	Senior Seminar	2 sh

A choice of one of the following: 2 sh

MUS 366 Conducting

MUS 367 Vocal Pedagogy

MUS 368/369 Methods and Materials of Piano Pedagogy and Practicum

MUS 411 Instrumental and Choral Arranging

In addition, each Music Performance major must complete:

(a) Applied music lessons, at least one semester at the 400 level 14 sh

(b) Half solo recital at the 300 level

(c) Full solo recital at the 400 level

(d) Ensemble from Music 101, 102, 103, 105 and 109 8 sh

Vocal majors must choose between MUS 102 and 105

Instrumental majors must choose between MUS 101, 103 or 109

Piano majors may choose between MUS 101, 102, 103, 105 or 109

(e) Keyboard proficiency

Concert attendance and departmental recital attendance

as outlined in the Music Student Handbook.

TOTAL 54 sh

In addition, vocal majors must take MUS 258, Diction for Singers I and MUS 259, Diction for Singers II.

The major in Music Technology requires the following courses:

MUS	111	The Materials of Music I	3 sh
MUS	112	The Materials of Music II	3 sh
MUS	113	Aural Skills I	1 sh
MUS	114	Aural Skills II	1 sh
MUS	210	Introduction to Music Technology	4 sh
MUS	215	Critical Listening	1 sh
MUS	310	Seminar in Music Technology	4 sh

MUS	355	Technology in Composition and Arranging	4 sh
MUS	495	Senior Seminar	2 sh
PHY	105	The Physics of Sound	4 sh
JCM	220	Digital Media Convergence	4 sh
JCM	340	Audio Production	4 sh

In addition, each Music Technology major must complete:

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|---|------|
| (a) Music Technology Internship (MUS 481, 1-4 sh) and Music electives | 8 sh |
| (b) Music History from the following: | 4 sh |
| MUS 217 World Music | |
| MUS 303 Music History for the Liberal Arts Student | |
| MUS 316 Classic and Romantic Music | |
| MUS 318 History of Jazz | |
| MUS 319 History of American Music | |
| (c) Ensembles from MUS 101, 102, 103, 105, 109 | 4 sh |
| (d) Ensemble from MUS 104, 107, 219 | 1 sh |
| (e) Four semester hours of Communication electives | 4 sh |
| JCM 345 The Art of Film and Video Editing | |
| JCM 364 Web Publishing | |
| JCM 365 Interactive New Media | |

Concert attendance as outlined in the Music Student Handbook

Total	56 sh
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An audition is required for acceptance into this program.

A major in Music requires the following courses:

MUS	111	The Materials of Music I	3 sh
MUS	112	The Materials of Music II	3 sh
MUS	113	Aural Skills I	1 sh
MUS	114	Aural Skills II	1 sh
MUS	211	The Materials of Music III	3 sh
MUS	212	The Materials of Music IV	3 sh
MUS	213	Aural Skills III	1 sh
MUS	214	Aural Skills IV	1 sh
MUS	154	Piano Class I	1 sh
MUS	155	Piano Class II	1 sh
MUS	315	The Music of Ancient Times Through Baroque	4 sh
MUS	316	Classic and Romantic Music	4 sh
MUS	495	Senior Seminar	2 sh

In addition, each music major must complete:

- | | |
|---|---------|
| (a) Eight semester hours Music electives at 300-400 level | 8 sh |
| (b) Six semesters of applied music lessons | 6-10 sh |
| (c) Ensembles 4 sh | |

Concert attendance and departmental recital attendance as outlined in the Music Student Handbook.

TOTAL	46-50 sh
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A minor in Music requires 20 semester hours. Students lacking functional knowledge of the keyboard must accumulate two semester hours in piano either prior to, or simultaneously with, their enrollment in Music 111 and 112.

The following courses are required:

MUS	111	The Materials of Music I	3 sh
MUS	112	The Materials of Music II	3 sh

A choice of one of the following: 4 sh

MUS	217	World Music	
MUS	303	Music History for the Liberal Arts Student	
MUS	315	The Music of Ancient Times Through Baroque	
MUS	316	Classic and Romantic Music	
MUS	319	History of American Music	
MUS	368/369	Methods and Materials of Piano Pedagogy and Practicum	

In addition, each Music Minor must complete:

(a)	One medium of applied music instruction	6 sh
(b)	Ensemble from MUS 101, 102, 103, 105 and 109	4 sh

TOTAL 20 sh

A minor in Jazz Studies requires 24 semester hours.

The following courses are required:

MUS	111	The Materials of Music I	3 sh
MUS	112	The Materials of Music II	3 sh
MUS	113	Aural Skills I	1 sh
MUS	114	Aural Skills II	1 sh
MUS	254	Jazz Improvisation I	1 sh
MUS	255	Jazz Improvisation II	1 sh
MUS	256	Jazz Harmony	2 sh
MUS	318	History of Jazz	4 sh

In addition, each jazz studies minor must complete:

(a)	One medium of applied music instruction	4 sh
(b)	Ensemble from MUS 104, 107 or 219	4 sh

TOTAL 24 sh

A minor in Music Technology requires 26 semester hours.

The following courses are required:

MUS	111	The Materials of Music I	3 sh
MUS	112	The Materials of Music II	3 sh
MUS	113	Aural Skills I	1 sh
MUS	114	Aural Skills II	1 sh
MUS	210	Introduction to Music Technology	4 sh
MUS	310	Seminar in Music Technology	4 sh
JCM	220	Digital Media Convergence	4 sh
JCM	340	Audio Production	4 sh

Ensembles from MUS 101, 102, 103, 105, 109 2 sh

TOTAL 26 sh

Applied Music: Individual and Group Instruction

Music majors/minors register for the appropriate level and area of applied music study as determined by audition and consultation with their advisor or the department chair. With permission of the department, enrolled students may register for any course in applied music. Weekly 30-minute lesson: one semester hour credit (Section A). Weekly 60-minute lesson: two semester hours credit (Section B). A special fee is required.

APPLIED MUSIC: INDIVIDUAL INSTRUCTION

Piano: 120, 220, 320, 420	Bassoon: 131, 231, 331, 431
Organ: 121, 221, 321, 421	Saxophone: 132, 232, 332, 432
Voice: 122, 222, 322, 422	Violin: 133, 233, 333, 433
Trumpet: 123, 223, 323, 423	Viola: 134, 234, 334, 434
French Horn: 124, 224, 324, 424	Cello: 135, 235, 335, 435
Trombone: 125, 225, 325, 425	String Bass: 136, 236, 336, 436
Baritone (Euphonium): 126, 226, 326, 426	Guitar: 137, 237, 337, 437
Tuba: 127, 227, 327, 427	Percussion: 138, 238, 338, 438
Flute: 128, 228, 328, 428	Electric Bass: 139, 239, 339, 439
Oboe: 129, 229, 329, 429	Harp: 140, 240, 340, 440
Clarinet: 130, 230, 330, 430	

Applied Music: Group Instruction

MUS 152,153. VOICE CLASS I and II	1 sh
Group voice instruction ranges from beginning to intermediate.	
MUS 154-156. PIANO CLASS I-III	1 sh
Group piano instruction ranges from beginner to intermediate.	
MUS 158. GUITAR CLASS	1 sh
Beginners develop musical skills with the guitar — simple chords, melodies and songs — using elements of classical guitar techniques as a foundation.	
MUS 258. DICTION FOR SINGERS I	1 sh
Students learn to use the International Phonetic Alphabet and are introduced to the pronunciation of English, Latin and French as it applies to vocal literature. Offered fall alternate years.	
MUS 259. DICTION FOR SINGERS II	1 sh
Students continue to learn the International Phonetic Alphabet and are introduced to the pronunciation of Italian and German as it applies to vocal literature. Offered spring alternate years.	

Music Materials, Structures and Techniques

MUS 111, 112. THE MATERIALS OF MUSIC I and II	3 sh
A study of the fundamentals of music, diatonic harmony and elementary voice-leading and part-writing includes an introduction to harmonic-melodic form, analysis and synthesis of harmonic practices through secondary seventh chords. Prerequisite for MUS 112: MUS 111. Offered fall and spring.	

- MUS 113, 114. AURAL SKILLS I and II** **1 sh**
 Study emphasizes melodic-harmonic-rhythmic dictation, sight singing and keyboard study. Prerequisite: MUS 112; Prerequisite for MUS 114: MUS 113. Offered fall and spring.
- MUS 210. INTRODUCTION TO MUSIC TECHNOLOGY** **4 sh**
 The course explores the effects of changing technology on music and provides an introduction to the basic elements, terminology and concepts of music technology. The course includes a survey of music software and hardware. Topics include computer-aided instruction, music notation, sequencing, basic MIDI, basic audio editing and synthesis.
- MUS 211, 212. THE MATERIALS OF MUSIC III and IV** **3 sh**
 A continuation of Music 112 on an advanced level includes complex chromatic harmonies and emphasizes analysis and composition of standard musical forms. Prerequisite: MUS 112. Prerequisite for 212: MUS 211. Offered fall and spring.
- MUS 213, 214. AURAL SKILLS III and IV** **1 sh**
 These courses provide advanced study in melodic-harmonic-rhythmic dictation, sight singing and keyboard study. Prerequisite: MUS 213. Offered fall and spring.
- MUS 215. CRITICAL LISTENING** **1sh**
 This course covers basic principles of physical acoustics, psychology of sound, aesthetics of sound with a critical listening study of music and sound. The course includes activities and exercises designed to develop the student's ability to define and evaluate aesthetic elements of live and recorded music. Prerequisite: MUS 111/113.
- MUS 254, 255. JAZZ IMPROVISATION I and II** **1 sh**
 Instrumentalists or vocalists develop skills in improvisational jazz performance techniques.
- MUS 256. JAZZ HARMONY** **2 sh**
 This course is a study of jazz harmonic vocabulary and its application to the jazz repertoire. Seventh chords, chord symbols, voicings, guide tones, color tones, voice leading and reharmonizations are examined. All students play the instrument of their choice and piano. Prerequisite: MUS 255.
- MUS 310. SEMINAR IN MUSIC TECHNOLOGY** **4 sh**
 This course focuses on studies and practical applications in music recording/sequencing and MIDI production. Foundational techniques of composition using music and audio software for notation and sequencing are also covered. Topics include practical application of MIDI systems to control synthesizers and sampling and a general knowledge of hardware associated with recording and input, including mics, audio interfaces and various MIDI controllers. A unit on live sound reinforcement is included in this course. Project oriented. Prerequisite: MUS 210.
- MUS 311. COUNTERPOINT** **4 sh**
 Analysis and composition of period works are part of the study of counterpoint from the 16th to 20th centuries with applications to various vocal and instrumental writings. Prerequisite: MUS 212.
- MUS 313. FORM AND ANALYSIS** **2 sh**
 This course acquaints the student with the standard forms of tonal music through the aural and visual study of micro and macro forms of representative works. Prerequisite: MUS 212. Offered fall of alternate years.
- MUS 355. TECHNOLOGY IN COMPOSITION AND ARRANGING** **4 sh**
 This course covers characteristics of instruments and vocal arranging normally found in commercial pop, jazz and studio settings with an emphasis on style and voicing problems in these idioms. There will be writing projects for vocal jazz ensemble, jazz ensemble, pop

groups and studio applications. This project-oriented course will include a unit specific to music copyrighting and publishing. Prerequisite: MUS 310.

- MUS 411. INSTRUMENTAL AND CHORAL ARRANGING** 2 sh
Students explore technical possibilities and limitations of individual instruments and voices. Study also covers arranging and transcribing for various combinations of instruments and voices. Prerequisite: MUS 112.
- MUS 413. 20th CENTURY TECHNIQUES** 2 sh
This course is a study of the changes which have taken place in music of the 20th century. Techniques to be studied include atonality, polytonality, serialism, integral serialism, dodecophony and electronic music. Prerequisite: MUS 112. Offered spring of alternate years.
- MUS 265-465. COMPOSITION** 1 sh
Students write compositions integrating techniques of studied repertoire as they explore musical composition in weekly individual meetings with an instructor. Prerequisite: MUS 112 or permission of instructor.

Literature and History

- MUS 216. THE STUFF OF MUSIC** 4 sh
Through a series of exercises, readings, outside class activities and class participation, students become familiar with the materials which form the basis of music, including instruments, notation and terminology. Hands-on application includes basic performance on rhythm instruments and composing simple music compositions.
- MUS 217. WORLD MUSIC** 4 sh
Text readings, listening, research, writing and class presentation are part of an introduction to the music of Asia, Eastern Europe, Africa, and Central and South America. Students gain increased awareness of the art and music of other cultures, make connections with their own art and folk traditions and search for shared meanings of all musical licensure.
- MUS 303. MUSIC HISTORY FOR THE LIBERAL ARTS STUDENT** 4 sh 225
Nonmusic majors gain improved skills to enhance musical enjoyment, basic knowledge of music styles and events, and focus on placing this knowledge in the context of world events and trends. Study covers selected personalities and works in music through substantial reading, listening, research and writing.
- MUS 315. THE MUSIC OF ANCIENT TIMES THROUGH BAROQUE** 4 sh
This survey of music through the Baroque period emphasizes Renaissance and Baroque counterpoint through reading, listening, analysis, research and writing. Prerequisite: MUS 112.
- MUS 316. CLASSIC AND ROMANTIC MUSIC** 4 sh
By reading, listening, research and writing, students explore the relationship of 18th- and 19th-century music to the world — as the expression of artists responding to political, social and philosophical environments. The course also emphasizes the progressive study of formal analysis, from smaller forms to the large single and multi-movement genres of the period. Prerequisite: MUS 112.
- MUS 318. HISTORY OF JAZZ** 4 sh
This overview of jazz music from about 1900 to the present is designed for the liberal arts major. Topics include jazz styles, individual musicians and the development and progress of jazz through the 20th century.

MUS 319. HISTORY OF AMERICAN MUSIC 4 sh
 Study of American music from 1620 to the present focuses on elements of various musical cultures (e.g., Western and Eastern Europe, Africa, Latin America) that have influenced the American style of music.

MUS 343. AFRICAN-AMERICAN COMPOSERS 4 sh
 This course looks at the lives of African-American composers, their music and the social structure within which they lived. The course allows students to investigate the artistic impact of American historical events and trends such as Jim Crow laws, segregation and cabaret cards.

MUS 345. THE MUSIC OF MILES DAVIS 4 sh
 Jazz musician, composer, innovator, arranger, trumpeter Miles Davis (1926-1991) is easily arguable as the most significant jazz musician who ever lived. This course will look in-depth at Davis' music and how it reflected American culture in each of the decades of the last half of the 20th century.

MUS 469. WOMEN IN MUSIC 4 sh
 This course will look at the lives and music of women musicians, composers and performers and the social structure within which they live and lived. The course will allow students to investigate the artistic impact of historical events and trends in not only America, but also the world, and how women in different eras were able to interact musically.

Music Education

The following technique courses are required for music majors seeking music teacher licensure.

MUS 361. PERCUSSION TECHNIQUES 1 sh

MUS 362. BRASS TECHNIQUES 1 sh

MUS 363. WOODWIND TECHNIQUES 1 sh

MUS 364. STRING TECHNIQUES 1 sh

MUS 365. CHORAL TECHNIQUES 1 sh

MUS 366. CONDUCTING 2 sh
 Students develop skill in baton and rehearsal techniques and interpretation in training and leading various ensembles of instruments and voices.

MUS 461. MUSIC EDUCATION IN THE PUBLIC SCHOOLS 4 sh
 A study of the methods and materials suitable for teaching at all levels covers the administration of band, orchestra and choral programs in the public schools with additional emphasis on marching band techniques. Prerequisite: MUS 112. Offered spring of alternate years.

Ensembles

MUS 101. WIND ENSEMBLE 1 sh
 Open to all students.

MUS 102. ELON CHORALE 1 sh
 Open to all students.

MUS 103. ELON CHAMBER ORCHESTRA 1 sh
 By audition only.

MUS 104. JAZZ ENSEMBLE 1 sh
 By audition only.

MUS 105.	ELON CAMERATA	1 sh
	By audition only.	
MUS 106.	CHAMBER ENSEMBLE	1 sh
	By audition only.	
MUS 107.	ÉLAN (vocal jazz ensemble)	1 sh
	By audition only.	
MUS 108.	PERCUSSION ENSEMBLE	1 sh
	By audition only.	
MUS 109.	ELON UNIVERSITY MARCHING BAND	1 sh
	This ensemble will furnish half-time entertainment for football games and serve as a model for music education majors in the instruction and development of various styles of marching bands. Offered fall.	
MUS 219.	JAZZ COMBO	1 sh
	Students explore jazz literature for small groups of instruments to gain an understanding of individual roles in a small ensemble. This will include planning, graphing and constructing improvisations within various musical forms.	
Other Offerings		
MUS 367.	VOCAL PEDAGOGY	2 sh
	This upper-level course focuses on the scientific and psychological aspects of singing and how this knowledge is useful to the teacher of voice. It introduces basic anatomy and the physical processes of phonation along with psychological concepts that aid in the training and use of the singing voice. Physiological topics include resonance, breath support, tone production, vowels registration and flexibility. Other topics include pedagogical methods, vocal problems and vocal artistry. Prerequisite: One year of private voice at the MUS 122-B level. Offered fall of alternate years.	
MUS 368.	PIANO PEDAGOGY PRACTICUM	1 sh
	The practical application of methods and skills learned in MUS 369. Prerequisite: MUS 369.	
MUS 369.	METHODS AND MATERIALS OF PIANO PEDAGOGY	3 sh
	Students interested in teaching piano in a private studio explore group and individual instructional techniques for beginning and intermediate students, suitable repertoire, basic keyboard musicianship and pupil psychology. Each student will teach a young piano student under faculty supervision.	
MUS 471.	SEMINAR: SPECIAL TOPICS	1-4 sh
	Small groups study under the guidance of a member of the staff.	
MUS 481.	MUSIC TECHNOLOGY INTERNSHIP	1-4 sh
	Field application of music technology theories and practices in professional music production or music technology related fields. The student can propose two internships at two hours each or propose a single 4-hour internship. Study abroad opportunities may be considered with the internship. Prerequisite: consent of music technology coordinator.	
MUS 491.	INDEPENDENT STUDY	1-4 sh
MUS 495.	SENIOR SEMINAR	2 sh
	This capstone experience for music includes a comprehensive evaluation of the student's previous education in the major field, a major project to demonstrate proficiency in the student's major area of interest or emphasis and preparation of materials necessary for enrollment in graduate school or the profession.	

Music Theatre

Chair, Department of Performing Arts: Associate Professor Rubeck

Professor: McNeela

Associate Professors: Becherer, Gang, K. Lee, Sabo, Wellford

Assistant Professors: Bower, Formato, Kearns, Smith, Wahl, Webb

Adjuncts: Flannery, Johnson

The Department of Performing Arts offers a Bachelor of Fine Arts in Music Theatre, a degree geared toward the student who wishes to pursue a career in performance or graduate studies following graduation. Admission to the program requires an audition demonstrating initial talent.

Coursework within this major is designed to train students in the three essential skill areas for music theatre: music, acting and dance. Students take studio dance classes in ballet, jazz, modern and tap, studio voice lessons, music theory, and a minimum of four semesters of acting. Further study includes the literature and history of music theatre.

Practical application of all aspects of study are expected through participation in department stage productions, concerts and recitals. Outreach to the professional world occurs throughout the course of study through participation in vocal, dance and theatre festivals, conventions, auditions and competitions. The final result is an artist prepared for entry to the world of professional performance.

A major in Music Theatre requires the following courses:

MTE	301	History of Music Theatre	4 sh
MTE	302	Music Theatre Literature	4 sh
MTE	321	Performance in Music Theatre	4 sh
MTE	495	Senior Seminar	4 sh
MUS	111	Materials of Music I	3 sh
MUS	113	Aural Skills I	1 sh
MUS	154	Piano Class	1 sh
THE	120	Acting I	4 sh
THE	220	Acting II	4 sh
THE	221	Acting III	4 sh
DAN	150	Dance for the Musical Stage I	1 sh
DAN	250	Dance for the Musical Stage II	1 sh
DAN	350	Dance for the Musical Stage III	1 sh
DAN	450	Dance for the Musical Stage IV	1 sh

In addition, each major must complete the following:

(a)	six semesters of private voice at appropriate level	12 sh
(b)	four semesters of studio technique courses in dance with a minimum of one credit in each of the following: Ballet, Jazz, Modern and Tap	6 sh
(c)	electives selected from Music Theatre, Theatre Arts, Dance or Music	14 sh
(d)	one semester hour of singing in an ensemble	1 sh

TOTAL **68 sh**

- MTE 301. HISTORY OF MUSIC THEATRE** 4 sh
This course, open to all students, explores the origins and development of music theatre, its theatrical conventions and major elements from the mid-18th century to the present. Offered fall.
- MTE 302. MUSIC THEATRE LITERATURE** 4 sh
The purpose of this course is to expose the student to the staples of the music theatre literature, to develop a critical sensitivity to the medium and to enable analysis of music, plots, characters and situations in contemporary music theatre. Prerequisites: MUS 111, 113. Offered spring.
- MTE 321. PERFORMANCE IN MUSIC THEATRE** 4 sh
This performance-oriented course provides a systematic approach to achieving a high level of singing-acting skills. Students also receive training and practice in selecting, preparing and presenting audition material. Prerequisites: MUS 122 B, THE 120. Offered spring.
- MTE 322. MUSIC THEATRE AND OPERA SCENE STUDY** 4 sh
This performance-oriented course integrates music and theatre performance skills through the selection, development and presentation of partnered scenes from music theatre and opera repertoire. Prerequisites: two semesters of MUS 122 B or permission of instructor.
- MTE 495. SENIOR SEMINAR** 4 sh
This capstone experience for senior majors centers on a practical project which demonstrates proficiency in performance skills and preparation for graduate study or entry into the profession. Prerequisite: senior majors only. Course is two semesters in length. Students must take both semesters. Offered fall and spring.

Non-Violence Studies

Coordinator: Associate Professor Cassebaum

In seeking to understand and find solutions to violence and social injustice, Non-Violence Studies explores the theory and strategies of non-violent social change. The minor considers violence in its many forms, including poverty, war and physical abuse, and in its many sources — individual, institutional, structural and cultural.

Non-Violence Studies is interdisciplinary; students are encouraged to integrate the methods and essential questions of different fields as they study violence and social injustice.

A minimum of 20 semester hours are required, including the four-hour capstone course. NVS 171 and 172, as well as an internship are recommended.

A minor in Non-Violence Studies requires the following:

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| NVS 461-469 capstone course | 4 sh |
| Sixteen semester hours selected from the following courses or other approved newly offered courses from at least two different departments. | 16 sh |

The following courses are regularly offered and listed by title in the catalog:

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| ENG | 337 | Asian Literature of Social Change |
| HST | 365 | Social Movements in Post Civil War America |
| HUS | 311 | Poverty and Social Welfare Policy |
| PHL | 115 | Ethical Practice |
| POL | 141 | International Relations |

POL	304	Theorists of Non-Violence
POL	345	International Terrorism
POL	367	Politics of Africa
POL	368	Latin American Politics
PSY	357	Criminal Behavior
REL	343	Women, Violence and Resistance
REL	344	Christianity and Social Justice
REL	348	Environmental Ethics
REL	353	Buddhism
SOC	241	Social Issues and Problems
SOC	245	Non-Violence of the Brave: From Gandhi to King
SOC	341	Ethnic and Race Relations

The following special topics courses are offered at various times, although not listed by title in the catalog:

ENG	110	Writing about Poverty
ENG	372	Literature of Non-Violence
GST	206	Studies in South Africa
GST/PHL	330	Economic Justice
GST	416	Wealth and Poverty
HST	133	Civil Rights Movement
HST	272	Civil Rights Movement
HST	463	Local Civil Rights History
NVS	171	Introduction to Mediation
NVS	172	Collaborative Conflict Resolution Skills
REL	464	History of Christian Non-Violence

TOTAL		20 sh
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- 230 **NVS 381. INTERNSHIP IN NON-VIOLENCE STUDIES** **1-4 sh**
 Research, service and occupational internships focusing on issues relating to violence and non-violence. Prerequisites: two courses in non-violence studies and permission of the coordinator.
- NVS 461-469. SEMINARS ON NON-VIOLENCE** **4 sh**
 These seminars combine two or more interdisciplinary approaches to the problem of violence. Each will include exploration of non-violent approaches to conflict situations. Prerequisites: two courses in non-violence studies.

Philosophy

Chair, Department of Philosophy: Professor Weston

Professor: Lubling

Associate Professors: Batchelor, Cahill

Assistant Professor: Schulman

Lecturer: Fowler

Adjunct: Jegstrup

Philosophy lies at the heart of a liberal arts education. Philosophy at Elon has both a wisdom orientation for exploring enduring human concerns and a practical intent to enhance our lives together and our care for the earth.

Philosophical study at Elon focuses on three sets of skills: (1) critical and constructive thinking — aiding students in identifying, analyzing and offering solutions to problems; (2) ethical practice — exploring ways to act wisely and effectively in our life with others; and (3) interpretive understanding — allowing students to bridge the meaning and value systems of diverse individuals, cultures and epochs.

Such skills are valuable for law and leadership, ministry and the helping professions, citizenship and service, and for deepening the quality of our lives. At 36 semester hours, the philosophy major is designed to allow room for a double major or a career-related minor.

A major in Philosophy requires the following courses:

PHL	113	Critical Thinking	4 sh
PHL	115	Ethical Practice	4 sh
PHL	331	Ancient Philosophy	4 sh
PHL	333	Modern Philosophy	4 sh
One course from the following:			4 sh
PHL	431	Contemporary Philosophy	
PHL	432	American Philosophy	
PHL	433	Marx, Darwin and Freud	
Three courses chosen from any additional philosophy offerings			12 sh
PHL 461	Integrative Tutorial		4 sh
TOTAL			36 sh

A minor in Philosophy requires the following courses:

PHL	113	Critical Thinking	4 sh
PHL	115	Ethical Practice	4 sh
One course from the following:			4 sh
PHL	331	Ancient Philosophy	
PHL	333	Modern Philosophy	
Two courses chosen from any additional philosophy offerings			8 sh
TOTAL			20 sh

PHL 113. CRITICAL THINKING 4 sh

This foundation course in critical thinking introduces reading and listening skills, argument analysis and evaluation, and creative problem-solving methods. Such skills are

valuable throughout life, from making effective presentations to promoting independent thinking. Offered fall and spring.

PHL 115. ETHICAL PRACTICE 4 sh

Ethical practice is a foundation course exploring ways to act wisely and effectively in our life with others. Drawing on the philosophical tradition and on critical examination of life situations, students engage such topics as personal integrity, sensitivity and fairness to others, and conditions for collaborative and respectful living. Offered fall and spring.

PHL 215. ETHICS AND DECISION MAKING 4 sh

This course explores the field of ethics with an emphasis on its application to decision making and leadership. It will explore nested contexts for decision making – environmental, institutional and interpersonal; use criteria for ethical assessment (e.g., what is good for the whole and fair to each participant-part in each context); and provide scope for ethical practice by means of a modest service learning component and case studies. This course is offered in conjunction with the Leadership minor. Students may receive credit for both PHL 115 and PHL 215, but may only count one course toward a Philosophy major or minor. Offered fall.

PHL 331. ANCIENT PHILOSOPHY 4 sh

This study of the origins of Western philosophy concentrates on the Golden Age of Greece, including such topics as Socrates, his predecessors and his great successors, Plato and Aristotle. Students consider what it means to live a human life in a humane and liberating communal context. Offered at least once every two years.

PHL 332. MEDIEVAL PHILOSOPHY 4 sh

This study focuses on 12th and 13th century European intellectual developments, showing how Platonic and Aristotelian strands blend with Jewish, Christian and Islamic elements. Special topics include Bernard and Abelard, Averroes and Maimonides, Hildegard and Mechtild, Aquinas and Bonaventure, and Dante and Eckhart.

PHL 333. MODERN PHILOSOPHY 4 sh

Discussion centers on crucial intellectual developments in the 17th and 18th centuries when the modern Western worldview arose. Specific attention is given to far-reaching changes in philosophical methods, theory of knowledge, new senses of self and world, and thinkers such as Descartes, Hume and Kant. Offered at least once every two years.

PHL 334. POLITICAL PHILOSOPHY 4 sh

Discussion focuses on the roots of modern political thought, including such key 17th- and 18th- century developments as the case for sovereignty in the modern nation state, the rise of individual rights and the rationale for modern democracy. Major thinkers such as Hobbes, Locke and Rousseau are studied against the background of their turbulent times.

PHL 337. DANTE'S JOURNEY 4 sh

This course will follow Dante's journey as expressed in *The New Life* and *The Divine Comedy*. In the process of following Dante's journey, we will explore the phenomenon of courtly love, go through Hell together, learn the process of getting in touch with the more subtle obstacles to our growth as we climb the seven-storied mountain of Purgatory and finally explore levels of consciousness that take us through the spheres of spiritual deepening to the Love that moves the sun and other stars.

PHL 338. NIETZSCHE AND THE DEATH OF GOD 2 sh

This course examines Friedrich Nietzsche's critique of traditional thinking, in particular his critique of the institutions and assumptions of Western religions and his challenge to bring forth a new type of human being in the face of the "Death of God." PHL 338, "Nietzsche and the Death of God," is a two-credit, half-term course that readily pairs with PHL 339, "Martin Buber and the Eclipse of God."

- PHL 339. MARTIN BUBER AND THE ECLIPSE OF GOD** 2 sh
 This course explores Martin Buber's dialogical philosophy as a response to the modern condition that is both uniquely Jewish and at the same time universal, and as a philosophy of healing in both the individual and the collective sense. PHL339, "Martin Buber and the Eclipse of God," is a two-credit, half-term course that readily pairs with PHL 338, "Nietzsche and the Death of God."
- PHL 341. PHILOSOPHY OF LAW** 4 sh
 This basic examination of the nature, function and limits of law gives attention to human rights and natural justice, law and morality, theories of punishment and questions of legal responsibility. The course is of particular interest to prelaw, business and political science students.
- PHL 342. PHILOSOPHY AND SOCIETY** 4 sh
 This course pursues a philosophical approach to the relation of individuals and social institutions. Topics considered may include the nature and possibility of the social sciences, philosophy of technology and the nature of community.
- PHL 343. AGES AND STAGES OF LIFE** 4 sh
 In an archetypal approach to the stages of life, this course draws from transpersonal psychology/philosophy and from myths and stories of the first and second halves of life. The study seeks practical insights from developmental psychology and various spiritual teachings to help students deal with crucial life issues.
- PHL 344. PHILOSOPHY OF SCIENCE** 4 sh
 Course study promotes the intelligent, critical assimilation of scientific information by developing a general framework for analyzing scientific claims. Topics include the structure of scientific reasoning, science in its cultural context, and the logical and other elements shaping scientific change.
- PHL 345. FEMINIST PHILOSOPHY** 4 sh
 This survey and application of feminist philosophies examines central ideas in feminist thought, including the social construction of gender, the exclusion of women from traditional philosophy and the intersection of gender with other social factors such as race and class.
- PHL 346. PHILOSOPHY OF THE BODY** 4 sh
 This course explores philosophical questions surrounding the body and the self. Central to our exploration will be an attempt to understand the various connections between embodiment (the fact that we have bodies and our experiences of those bodies) and subjectivity (the fact that we are persons, capable of action and choices). The course includes contemporary and historical readings, extensive written work and activities based on the course material.
- PHL 348. ENVIRONMENTAL ETHICS** 4 sh
 Students explore the bearing of philosophical and religious ethics upon practical problems regarding the natural environment. This course also considers the possible need for new ethical frameworks to address the environmental crisis we now face. (Cross-listed with REL 348.)
- PHL 352. EASTERN PHILOSOPHY** 4 sh
 Eastern Philosophy centers first on ancient China, exploring *The Book of Changes* and the thought of Lao Tzu and Confucius. The course continues with investigation of Buddha's insight, following Mahayana Buddhism into China where it becomes Zen. Finally, the course examines the spirit of Zen and its influence on Japanese arts and culture.
- PHL 355. PHILOSOPHY OF RELIGION** 4 sh
 This course explores Eastern and Western approaches to religious experience and notes differences between the literal, moralistic (exoteric) and the symbolic, mystical (esoteric) understandings of any religion. Students examine parable, teaching story, paradox and the

problem of religious language and consider ways of assessing religious claims, communities and personal practices. (Cross-listed with REL 355.)

PHL 360. PHILOSOPHY OF EDUCATION 4 sh

A philosophy of education is an interconnected set of views about what education is, what it is to learn and to teach, what knowledge is and what it is good for. These are fundamental questions to which the possible answers vary dramatically. This course begins by exploring the philosophy of education implicit in American education today and proceeds into a range of increasingly challenging alternatives.

PHL 361. THEMES IN THE FILMS OF WOODY ALLEN 4 sh

This course examines the works of Woody Allen as a paradigm case of the artistic nature of films and as a source for profound philosophical issues. Students are introduced to the general framework of the Philosophy of Art and look critically at issues concerning the medium of film as an art form as well as the problem of relativism across the many realms of value.

PHL 371-379. SPECIAL TOPICS 4 sh

Special topics are variable courses of timely and enduring interest. Past and current offerings include:

- PHL 371 Restorative Justice
- PHL 373 Philosophy and the Holocaust
- PHL 374 Heidegger
- PHL 375 Philosophy and Film
- PHL 377 Theories of Knowledge
- PHL 378 Philosophy of Human Experience

PHL 431. CONTEMPORARY PHILOSOPHY 4 sh

Students become acquainted with philosophical trends in the 20th century and develop appropriate skills of inquiry. The course surveys the changing landscape of philosophy in this volatile century and introduces students to key figures who have shaped that landscape.

PHL 432. AMERICAN PHILOSOPHY 4 sh

Focusing on the rich heritage of 19th- and 20th-century American thought from such figures as Emerson, Thoreau, Pierce, James, Dewey and others, this course emphasizes the originality of American philosophy and its continuing relevance.

PHL 433. MARX, DARWIN AND FREUD 4 sh

These revolutionary makers of the modern mind — Marx, Darwin and Freud — have had enduring influence on subsequent thought in such diverse fields as philosophy and politics, biology and religion, sociology and psychology. This course examines their work in light of more recent attempts to incorporate, reform and extend their insights.

PHL 461. INTEGRATIVE TUTORIAL 4 sh

This capstone course integrates the student's understanding of the history, issues and demands of philosophy via readings, class discussion and individual mentoring projects with philosophy faculty. It culminates with a final project on a topic chosen by the student which requires substantial philosophical research, writing and reflection and is evaluated by all members of the department. Offered fall of senior year.

PHL 471. SEMINAR: SPECIAL TOPICS 4 sh

PHL 481. INTERNSHIP IN PHILOSOPHY 1-4 sh

The internship provides work experience in a setting that is rich with practical philosophical problems. The goal is to enrich the student's appreciation of the link between philosophy and life. Offered on an individual basis when suitable opportunities can be arranged. Permission of the department is required.

Physical Education and Health

Chair, Department of Health and Human Performance: Associate Professor J. Davis
Professors: Beedle, Calhoun

Associate Professors: Hall, Miller, C. Smith

Assistant Professors: Bixby, Ketcham, Morningstar, Stringer

Senior Lecturer: Walch

Lecturers: E. Bailey, Hedrick, Tapler

Instructors: Bender, Leonard, Perry

The Physical Education and Health curriculum is located within the Health and Human Performance Department and is designed to prepare prospective K-12 teachers to be active and thoughtful practitioners in a community of learners. Courses are aimed at evaluating, improving and applying skills through knowledge and inquiry in a professional manner.

A major in Physical Education and Health requires the following courses:

DAN	115	Folk, Square and Social Dance	2 sh
PEH	125	Skills and Activities for Teaching	2 sh
PEH	211	History/Foundations of Physical Education, Health and Sport	4 sh
PEH	310	Motor Learning Theory for Teaching and Coaching	4 sh
PEH	321	Biomechanics	4 sh
PEH	324	Nutrition	4 sh
PEH	325	Substance Abuse and Human Behavior	4 sh
PEH	360	Physical Education Pedagogy (Grades K-5)	4 sh
PEH	362	Healthful Living in the Elementary School	2 sh
PEH	410	Administration and Management	4 sh
PEH	411	Measurement and Evaluation	2 sh
PEH	421	Chronic and Acute Diseases	4 sh
PEH	423	Physical Education Pedagogy (Grades 6-12)	4 sh
PEH	427	Health Education Pedagogy (Grades 6-12)	2 sh
ESS	422	Physiology of Exercise	4 sh
BIO	161	Human Anatomy	4 sh
BIO	162	Human Physiology	4 sh
TOTAL			58-59 sh

Students must show proof of valid First Aid/CPR certification anytime prior to graduation.

Licensure Requirements:

EDU	211	Schools and Society	4 sh
EDU	322	Reading in the Content Area	2 sh
EDU	480	Student Teaching Seminar	2 sh
EDU	481	Supervised Observation and Student Teaching	10 sh
CIS	220	Computers and Teaching	3 sh
PSY	321	Educational Psychology	4 sh
TOTAL			25 sh

A minor in Physical Education and Health requires the following courses:

PEH	211	History/Foundations of Physical Education, Health and Sport	4 sh
PEH	310	Motor Learning Theory for Teaching and Coaching	4 sh
PEH	325	Substance Abuse and Human Behavior	4 sh
Eight hours of 300/400 level courses from the major requirements			8 sh
TOTAL			20 sh

A minor in Coaching requires the following courses:

PEH	125	Skills and Activities for Teaching	2 sh
PEH	310	Motor Learning Theory for Teaching and Coaching	4 sh
PEH	341	Theory of Coaching	2 sh
PEH	410	Administration & Management	4 sh
PEH	423	Physical Education Pedagogy, Grades 6-12	4 sh
PEH	481	Internship in Coaching	2 sh
TOTAL			18 sh

Physical Education and Health Courses

PEH 125. SKILLS AND ACTIVITIES FOR TEACHING 2 sh

Students learn and practice the rules, skills and strategies for selected activities taught in physical education settings. Activities include a variety of individual, dual and team activities. This course requires significant physical activity. Offered spring.

PEH 211. HISTORY/FOUNDATIONS OF PHYSICAL EDUCATION, HEALTH AND SPORT 4 sh

An introduction to the philosophical, psychological and sociological foundations and history of Physical Education, Health and Sport. Current issues and trends are examined including the economic impact of physical activity on society. Offered spring.

PEH 305. LEGAL ASPECTS 2 sh

This course provides a study of the legal environment of leisure, sport, health and school organizations, emphasizing applications of tort, criminal, employment, contract, property and constitutional law. Students learn the principles of risk management and relevant applications and discuss current legislation affecting the field. Offered fall and spring.

PEH 310. MOTOR LEARNING THEORY FOR TEACHING AND COACHING 4 sh

This course examines the theories of motor skill acquisition and performance. Students will study the neurobiological subsystems associated with learning motor skills. Synthesis of experimental approaches in motor learning research will provide students with a framework for practical application in educational settings. Prerequisite: junior/senior standing. Offered fall.

PEH 321. BIOMECHANICS 4 sh

Students study the musculoskeletal system and biomechanics from the point of view of Physical Education activities, exercise/sports injuries and sports skills. Laboratory activities include the use of motion analysis software for projectile analysis, gait analysis, vertical jump analysis, conservation of angular momentum, analysis of lifting and calculation of center of gravity. This course requires a two-hour laboratory. Prerequisite: BIO 161or BIO 343; for ESS majors, ESS 263. Offered fall and spring.

PEH 324. NUTRITION 4 sh

This course provides a comprehensive study of nutrient basics, digestion, metabolism, vitamins, minerals, supplements, steroids, weight management, eating disorders, nutri-

tional deficiencies and imbalances. Emphasizes practical application of nutrition concepts in exercise settings. Prerequisite: junior/senior standing. Prerequisite: BIO 162. Offered fall and spring.

- PEH 325. SUBSTANCE ABUSE AND HUMAN BEHAVIOR 4 sh**
This course provides a comprehensive study of factors influencing alcohol and other drug use including personality, societal and biological factors. Emphasizes prevention through the curriculum, identifying the high-risk student and appropriate referrals in the school system and community. Students will gain experience using technology as a strategic resource related to this topic. Offered spring.
- PEH 341. THEORY OF COACHING 2 sh**
Provides a thorough study of the role of coaches in the school and community, including coaching philosophies, ethics and motivational theories. Prerequisite: PEH 125. Offered fall.
- PEH 360. PHYSICAL EDUCATION PEDAGOGY, GRADES K-5 4 sh**
This class is designed to prepare students to teach physical education in grades K-5. This preparation includes knowledge of movement education, motor skills, skill analysis and pedagogy. Clinical hours in public schools are required. Prerequisite: PEH 211. Offered spring.
- PEH 362. HEALTHFUL LIVING IN THE ELEMENTARY SCHOOL 2 sh**
This course provides a study of health, safety and physical education needs of elementary children (including content and methodology) and the integration of those needs with the curriculum. Observation hours in the public schools required. Prerequisite: EDU 211 or permission of instructor. Offered fall and spring.
- PEH 410. ADMINISTRATION AND MANAGEMENT 4 sh**
This course provides students with the opportunity to critically examine and compare administrative theories, organizational concepts, principles and procedures. Students will examine the role of administration in contemporary physical education, health education and sport settings. Prerequisite: junior/senior standing. Offered spring.
- PEH 411. MEASUREMENT AND EVALUATION 2 sh**
This course includes the study, administration and interpretation of psychomotor, cognitive and affective tests for use in K-12 settings. The objective of the course is to enable physical education and health majors to gain the knowledge and skills necessary to conduct and interpret a variety of measurement techniques. Prerequisite: PEH 211. Offered fall.
- PEH 421. CHRONIC AND ACUTE DISEASES 4 sh**
Students study the interdependency of body systems and diseases and conditions that affect human health and well-being. Topics include the historical foundation of health professions, immunology, pathophysiology of prominent acute and chronic diseases, socio-cultural factors that influence health, and consequences and prevention of major health risk behaviors. Methods of health appraisal and screening are also investigated. Prerequisites: BIO 161, 162. Offered fall and spring.
- PEH 423. PHYSICAL EDUCATION PEDAGOGY, GRADES 6-12 4 sh**
This course covers the methods, materials and techniques of teaching physical education, including organization and planning of the total 6-12 curriculum and daily programs. Public school practicum required. Prerequisite: junior/senior standing. Offered fall.
- PEH 427. HEALTH EDUCATION PEDAGOGY, GRADES 6-12 2 sh**
This course examines various methods for curriculum planning and evaluation. Students develop unit plans and examine a variety of approaches for teaching middle and high school health. Public school practicum required. Prerequisites: PEH 211, junior/senior standing and should be taken concurrently with PEH 423. Offered fall.

PEH 481. INTERNSHIP IN COACHING 2 sh

This course provides students with 80 hours of experiential opportunities in coaching and addresses the Sports Pedagogy domain of the National Association of Sport and Physical Education (NASPE) National Coaching Standards. Students must make arrangements with their professor the semester prior to registering for the internship. The internship may take place in any approved setting at the middle, high school or college level. Prerequisite: Completion of 10 hours in the coaching minor; 2.0 overall GPA. Offered fall, spring and summer.

PEH 491. INDEPENDENT STUDY 1-4 sh**PEH 499. RESEARCH IN PHYSICAL EDUCATION AND HEALTH 1-4 sh**

Independent research project supervised by faculty mentor.

Health Education Courses**HED 111. CONTEMPORARY WELLNESS ISSUES 2 sh**

Students will study selected topics in personal wellness. Topics may include nutrition and weight management, exercise for health and wellness, psychosocial aspects of health and wellness and the effects of alcohol and other drugs. Students will examine current issues pertaining to personal choices and well-being. This course meets half-semester and satisfies first-year core requirements. Offered fall and spring.

HED 220. FIRST AID AND CPR FOR THE PROFESSIONAL RESCUER 1 sh

This is a course is designed to teach professional rescuers the skills needed to respond appropriately to breathing and cardiac emergencies as well as basic first aid emergencies. Recommended for any student pursuing a career as an allied health care professional, EMT, public safety personnel or medical professional. Special fee: \$23. Offered fall and spring.

Physical Education Courses

The Physical Education (PED) activity program is designed to promote the acquisition and application of psychomotor, cognitive and affective skills in a variety of recreational and sport settings. Emphasis is placed on individual skill development. Students will have the opportunity to test their proficiencies; demonstrate knowledge of rules and etiquette; and experience the ways in which physical activity contributes to the physical, psychological and emotional states of well being.

PED 100. BEGINNING TENNIS 1 sh

Students learn basic rules, skills and strategies of tennis. Offered fall and spring.

PED 101. RACQUETBALL 1 sh

Students learn basic rules, skills and strategies of racquetball. Offered fall and spring.

PED 105. BEGINNING GOLF 1 sh

Students learn basic rules, skills and strategies of golf. Offered fall and spring. Special fee: \$30.

PED 106. BEGINNING SWIMMING AND EMERGENCY WATER SAFETY 1 sh

An introduction to basic swimming techniques and general water safety instruction, including how to respond effectively in a water emergency. The goal is to create an awareness of causes and prevention of water accidents. Beginning Swimming and Emergency Water Safety certificate given. Special fee: \$13.

PED 107. LIFEGUARD TRAINING 3 sh

Students gain knowledge and skills for aquatic safety and nonsurf lifeguarding, first aid, professional rescuer CPR and head lifeguarding. Students will receive Red Cross certification upon successful completion. Prerequisites: strong swimming skills. Special fee: \$28.

- PED 109. AEROBIC CONDITIONING AND WEIGHT TRAINING** **1 sh**
 Progressive development of physiological fitness designed to meet the needs of the individual student, including weight and cardiorespiratory training. Students will learn how to design and implement a weight program based on their individual needs. Offered fall and spring.
- PED 115. BASIC CANOE AND CANOE CAMPING** **1 sh**
 This is an introductory course in the basics of canoeing, whitewater canoeing and canoe camping. It is intended for beginners as well as experienced paddlers. The course stresses technique, safety and enjoyment. Instruction is designed to provide both an understanding of the principals of river canoeing and an opportunity to develop skill through practice. You will learn about equipment, strokes, maneuvering in current, paddling in class II whitewater, river reading, safety skills, rescue techniques and knot tying. There will be plenty of opportunity to paddle both solo and in tandem. You will also learn how to plan and conduct a multi-day canoe camping adventure that stresses “Leave No Trace” principles. Offered fall. Special fee: \$200.
- PED 116. OUTWARD BOUND EXPERIENCE** **1-3 sh**
 This is a course in wilderness survival, including physical survival skills, fitness, cognitive and emotional skills and study of the natural world. Offered as personnel are available or Independent Study. Special fee applies.
- PED 120. WHITEWATER CANOEING** **1 sh**
 This is an introductory course in whitewater canoeing. It stresses technique, safety and enjoyment. Instruction is designed to give participants a solid foundation in class II whitewater and includes choosing the correct equipment, balance, bracing, paddling strokes, whitewater maneuvers (upstream and downstream ferries, eddy turns & peel-outs), river reading, safety and assisted and self-rescue techniques. If during the course students reach proficiency in class II whitewater, the class may then advance to paddling class III whitewater before it concludes. Offered spring. Special fee: \$200.

Physics

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Chair, Department of Physics: Professor P. Das

Professor: F. Harris

Associate Professors: Agnew, Crider, D'Amato

Assistant Professors: Altmann, Hargrove-Leak, Kamela

Lecturer: Moreau

Physics is the great intellectual web that underlies our understanding of the universe. Not only is a background in physics fundamental for all scientists, but it also develops a powerful set of mental tools that are invaluable in any field. Our majors pursue research into the mysteries of deep space, the subatomic world and the fascinating physics of everyday objects. They are also successful in business, engineering and a myriad of other careers thanks to the quality of mind that they develop while studying the most profound and engaging material there is — physics.

One of the great strengths of Elon's physics program is the close working relationship between faculty and students. All students are encouraged to be involved in research activities. Currently, these include a study of particle physics, the microscopic properties of crystals, simulation of mechanical and dynamical systems, the history and philosophy of science, and many other projects. The department is very interdisciplinary with experience in science pedagogy, neuroscience, computational theory, engineering, astronomy, geology and environmental studies. Majors and minors can expect a diverse and interesting range of opportunities for coursework and research both within the traditional realm of physics and across disciplinary boundaries.