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6743561

Began: 12:02

**Undergraduate Course Review Committee (UCRC)**  
Tuesday, April 03, 2018 at 12:00 – 1:00 PM  
College of Sciences (CSB) 221

AGENDA

- I. Welcome and guest introductions

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- II. Confirmation of Quorum - ✓
- III. Approval of March 06, 2018 meeting minutes - approved
- IV. Course Action Agenda
  - a. Special Topics Additions
  - b. Course Additions
  - c. Course Revisions
- V. Adjournment 12:45

**UNDERGRADUATE COURSE REVIEW COMMITTEE MEETING  
ATTENDANCE SHEET 4/3/17**

*Tamra Legron-Rodriguez M.A. 1/16 Chemistry*

Last	First	SIGNATURE	DEPARTMENT
Anderson	Kim		Social Work
Bai	Yuanli	<i>Bai Yuanli</i>	Mechanical and Aerospace Engineering
Filler	Dennis	<i>Dennis Filler</i>	Civil, Environmental, and Construction
Hall	R. Mark		Writing and Rhetoric
Hoffman	Bobby		School of Teaching, Learning and Leadership
Jones	Anna		English
Lynxwiler	John		Sociology
Murphy	Kevin		Foodservice and Lodging Management
Neuberger	Lindsay		Communication
Kar	Aravinda		Optics and Photonics
Kinchen	Elizabeth	<i>Elizabeth Kinchen</i>	Nursing
Samsam	Mohtashem	<i>Samsam</i>	Biomedical Sciences
Schellhase	Kristen	<i>Kristen Schellhase</i>	Health Professions
Tamberelli	Frank	<i>Frank Tamberelli</i>	Integrated Business
Venecek	John		Research and Information Services

*Gelfuso Andrea Andre Gelfuso College of Education : Human Performance*

<b>Ex-Officio Members</b>			
Last	First	SIGNATURE	DEPARTMENT
Allred	Kelly		Nursing
Covelli	Maureen		College of Nursing
Dorman	Teresa	✓	College of Sciences
Dupuis	Martin		Burnett Honors College
Hagan	David		College of Optics and Photonics
Hepner	Lynn		College of Arts and Humanities
Hitchcock	Dorilyn		College of Medicine
Hoerrner	Keisha	✓	Teaching and Learning
Jones	Foard		College of Business Administration
Johnson	Darrell		College of Business Administration
Mendez	Jesse		College of Education and Human Performance
Reilly	Charles	<i>Chk Reilly</i>	College of Engineering and Computer Science

Schippert	Claudia		College of Undergraduate Studies
Wang	Youcheng		Rosen College of Hospitality Management
Wolf	Ross	Schellhase for wolf	College of Health and Public Affairs

Consalol Karen / Kau Consalol / COHPA  
 Valerie Simis / Valri Simi / COS - Psych



# Course Agenda 4/03

## Special Topic Additions:

### College of Sciences Special Topics Additions

COM 2930 ST: Principles of Intercultural Communication Competency 3(3,0)

Tabled 3/06/18

PR: COM 1000 or SPC 1608 or SPC 1603C or C.I. Introduces principles of intercultural competency to improve communication between people of different cultures. *Occasional.*

**Abbrev:** (29 of 30 chars) Principles of Inter Comm Comp

**Discussion with others:** None noted.

COM 3930 ST: Communication Competence for Cultural Entry/ Re-Entry 3(3,0)

Tabled 3/06/18

PR: COM 2930: ST: Principles of Intercultural Communication Competency or previous study abroad or domestic internship or

C.I. Explores the entry and re-entry process, communication variables involved in cultural exchanges and student abroad experiences. *Occasional.*

**Abbrev:** (30 of 30 chars) Comm Comp for Cultural Ent/ReE

Discussion with others: None noted.

PHY 4932 ST: Physical Basis of Life 3(3,0)

PR: CHM 2045 & CHM 2046, plus either PHY 2048 & PHY 2049 or PHY 2503 & PHY 2054

~~The course covers the~~ molecular and physical basis of life processes. For juniors and seniors majoring in natural sciences, biomedical sciences, and health sciences. *Fall 2018*

**Abbrev:** Physical Basis of Life

Rationale: To fill a gap in our current course offering. There is currently no catalog covering comprehensively the physical fundamentals that make life possible. Such a course is highly desirable for physics and chemistry majors going into biomedical sciences, as well as for biomedical majors who want a deeper understanding of fundamentals... *Fall 2018*

RTV 3930 ST: Principles of Post Production 3(3,0)

PR: RTV major and RTV3511 with a "C" or better, or C.I.

Students learn the basic theories and conventions applied to editing video and audio, and the role of the editor in visual storytelling. *Fall 2018*

**Abbrev:** Prin. Post. Prod.

Rationale: This is a new course that was approved RTV-3570C for Fall 2018.

✓ **SPC 3930**

**ST: Speech and Debate Practicum**

**1-3(1-3,0)**

PR or CR: Participation in the Speech or Debate Team or C.I.

Training and participation in intercollegiate speech and/or debate. *Fall 2018*

**Abbrev:** Speech and Debate Practicum

Rationale: This provides students with the opportunity to obtain academic credit for the level of research that they complete each year they participate in the speech and/or debate team.

✓ **ZOO 3930**

**ST: Ornithology**

**3 (3,0)**

PR: A grade of "C" or better in BSC 2010C and BSC 2011C or C.I.

Comprehensive course in bird biology covering global diversity, evolution and systematics, anatomy, physiology, behavior, and ecology. *Spring 2019*

**Abbrev:** Ornithology

Rationale: This course opens up the topic of bird biology to undergraduate students and fulfills a need within the Biology/PreVet and Ecology/Evolution/Conservation tracks.

College of Education and Human Performance Special Topics - *Approved*

✓ ~~EEX 2930~~ *1930*

**ST: Employment, Self-Advocacy, and Disability**

**3 (3,0)**

PR: None

Overview of principles, practices, employment strategies and outcomes as it relates to career readiness for individuals with special needs. *Fall 2018*

**Abbrev:** Emp., Self-Advocacy & Dis.

Rationale: Provide employment training and strategies for persons with intellectual disabilities (ID) alongside exceptional education majors in an inclusive environment.

**MHS 1930**

**ST: Career Development I**

**3 (3,0)**

PR: None

This course addresses career development including career theory, career choice and decision-making, interpersonal communication, professionalism, workplace ethics and culture and boundary making. Students will understand and demonstrate the key competencies of career readiness including leadership, communication skills, and work ethic. This course is appropriate for individuals interested in working with individuals with unique abilities or students enrolled in the IES program. *Spring 2019*

**Abbrev:** Career Development I

Rationale: This course is a specially designed to fit the growing need for IES students to be competent in recognizing potential career options and increasing skill to achieve employability.

✓ **MHS 1931**

**ST: Career Development II**

**3 (3,0)**

PR: MHS 1930 Career Development I

This course examines career development, self-assessment activities, career choice decision-making, career exploration and skills necessary to obtain employment while providing opportunities for students to develop the necessary skills in the areas of career development. This course is appropriate for individuals interested in working with individuals with unique abilities or students enrolled in the IES program. *Spring 2019*

**Abbrev:** Career Development II

Rationale: This course is a specially designed to fit the growing need for IES students to be competent in recognizing potential career options and increasing skill to achieve employability. This course offers a greater understanding of career options and skills to achieve employment success.

✓ **MHS 2930**

**ST: Career Development III**

**3 (3,0)**

PR: MHS 1930 Career Development I and MHS 1930 Career Development II

Overview of career development transitions, focusing on the transition from campus life to career including communication skills, workplace ethics and culture, accountability and job sustainability. This course is appropriate for individuals interested in working with individuals with unique abilities or students enrolled in the IES program. *Spring 2019*

**Abbrev:** Career Development III

Rationale: This course is a specially designed to fit the growing need for IES students to be competent in recognizing potential career options and increasing skill to achieve employability. This course offers an in depth look at employability and sustainable employment.

✓ **MHS 1931**

**ST: Personal Leadership**

**3 (3,0)**

PR: None

An entryway into personal leadership, motivation, finances, integrity, and time management. Topics covered include budgeting, intrinsic versus extrinsic motivation, intercultural competence, and career management. This course is appropriate for individuals interested in working with individuals with unique abilities or students enrolled in the IES program. *Spring 2019*

**Abbrev:** Personal Leadership

Rationale: Addresses personal leadership skills including self-regulation of emotions/interpreting the emotions of others, conflict resolution, time manag., self-awareness, & development of self-efficacy. Students will understand/demonstrate key components of personal development, employability including leadership communication skills, conflict management, & intercultural fluency.

✓ **MHS 2930**

**ST: Internship**

**1-3 (1,1-3)**

PR: None

This course builds on previous knowledge, life experiences, and personal values to make meaning of the 200 required hours of field experience gained during the course of this semester. This course requires active learning, continuous reflection, and problem solving skills and is designed to help the student begin to develop competence in the workplace. This course is appropriate for individuals interested in working with individuals with unique abilities or students enrolled in the IES program. *Spring 2019*

**Abbrev:** Internship

Rationale: This course is being offered to provide community experience for students to engage with local community and local job market in hopes this field experience will lead to employability.

College of Business Administration Special Topics - APPROVED

✓ **GEB 4932**

**ST: Business Climate Analysis**

**3(3,0)**

Examines the impact of changes in the external environment on industries and businesses. Follows PESTEL framework, considers political, economic, socio-cultural, technological, environmental, and legal factors. *Fall 2018*

**Abbrev:** Business Climate Analysis

Rationale: Teach students how various external factors can influence industries and business.

✓ Rosen College of Hospitality Special Topics - APPROVED

**HFT 4930**

**ST: Theme Park & Attraction Technology**

**3(3,0)**



PR: HFT 4755 Theme Park and Attraction Management

This course explores various technologies used in the design and operation of theme parks and attractions, such as amusement devices, operational and IT software packages as well as ride and show systems. *Occasional*

**Abbrev:** Theme PK & Attractn Technology

Rationale: The use of technology in theme parks and attractions is at an all-time high with new and rapid advances. Students in the theme park and attractions track are missing the content that would be covered in this course. Adding this elective course to the list of theme park and attractions courses will give students a more well-rounded education.

### Course Additions for 2019-2020 Undergraduate Catalog:

#### College of Computer Engineering and Computer Sciences Course Additions - APPROVED

✓ EMA 3XXX                      Thermodynamics of Materials                      3(3,0)

PR: MAC 2313, PHY 2048C, and EGN 3365 or EMA 3706

First, second, and third laws of thermodynamics, gas behavior, Helmholtz and Gibbs free energies, Phase equilibrium and diagrams, solutions, reactions, and electrochemistry. *Spring*

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case

**Abbrev:** Thermodynamics Materials

Rationale: Required course for BSMSE. Approved by CECS UG program committee.

✓ EMA 4XXX                      Materials Senior Design I                      3(3,0)

PR: EMA 4XXX (Transport Phenomena of Materials), EMA 4XXX (Experimental Techniques in Materials II), EMA 4413 and EMA 4XXX (Phase Transformations and Microstructural Development in Metals and Ceramics.) and Department Consent.

Foundation of capstone engineering design course covering product or process design and development. *Fall*

**Abbrev:** Materials Senior Design I

Rationale: This course is a foundational part of the proposed undergraduate program in materials science and engineering.

✓ EMA 4XXX                      Materials Senior Design II                      3(3,0)

PR: EMA 4XXX (Experimental Techniques in Materials II), EMA 4413 and EMA 4XXX (Phase Transformations and Microstructural Development in Metals and Ceramics.), EMA 4XXX (Materials Senior Design I).

Capstone engineering design course. Students work in teams on projects evaluating a society or industry-based materials problem, then implement, and evaluate a design aimed at addressing this problem. *Spring*

**Abbrev:** Materials Senior Design II

Rationale: This course is a foundational part of the proposed undergraduate program in materials science and engineering.

✓ **EMA 4XXX**                      **Transport Phenomena in Materials**                      **3(3,0)**

PR: EMA 4XXX (Kinetics of Materials)

Momentum transport, laminar and turbulent flow. Energy transport, conduction, convection and radiation. Mass transport in solid and fluids. *Spring*

**Abbrev:** Transport Phenom Materials

Rationale: Required course for BSMSE. Approved by CECS UG program committee.

✓ **EMA 4XXX**                      **Phase Transformations and Microstructural Development in Materials 3(3,0)**

PR: EGN 3365, EMA 3000, and EMA 3XXX (Structures of Materials)

Structure, properties and processing of materials throughout human history, and how they influence the development of society, including emerging materials for the future. *Spring*

**Abbrev:** Phase Trans Micro Dev Metals

Rationale: Required course for BSMSE. Approved by CECS UG program committee.

✓ **EMA 4XXX**                      **Kinetics of Materials**                      **3(3,0)**

PR: EMA 3XXX (Thermodynamics of Materials)

Reaction and transport/diffusion. Kinetics of gas-solid, liquid-solid and solid-solid interactions. Transformation kinetics and microstructural changes. *Fall*

**Abbrev:** Kinetics Materials

Rationale: Required course for BSMSE. Approved by CECS UG program committee.

**EMA 4XXX** **C**                      **Materials Processing Laboratory**                      **3(2,2)**

PR: EMA 3012C and EMA 3124

Theory and practice of common processing techniques for metals, ceramics, polymers including casting, heat treatment, sintering, and extrusion. Process-properties relations. *Fall*

**Abbrev:** Materials Processing Lab

Rationale: Required course for BSMSE. Approved by CECS UG program committee.

✓ **EMA 4XXX**                      **Materials in Society**    **2(2,0)**

PR: EGN 3365, EMA 3000, and EMA 3XXX (Structures of Materials)

Structure, properties and processing of materials throughout human history, and how they influence the development of society, including emerging materials for the future. *Spring*

**Abbrev:** Materials in Society

Rationale: Required course for BSMSE. Approved by CECS UG program committee.

✓ **EMA 4XXX**                      **Structures of Materials**    **3(3,0)**

PR: EGN 3365 or EMA 3706

Lattice, reciprocal space, symmetry, point groups, plane groups, space groups, x-ray and other diffraction techniques. Structures of metals, ceramics, polymer and biomolecular materials. *Fall*

**Abbrev:** Structures Materials

Rationale: Required course for BSMSE. Approved by CECS UG program committee.

✓ **EMA 4XXXC**                      **Experimental Techniques in Materials II**    **3(2,2)**

PR: EMA 4XXXC (Materials Processing Laboratory) and EMA 4223

Theory and practice of common materials characterization techniques for assessment of physical/functional properties and characteristics of materials including x-ray diffraction, electrical, optical, magnetic properties, biocompatibility, spectroscopy, rheology, differential scanning calorimetry, thermal gravimetric analysis and dynamic mechanical analysis. *Fall*

**Abbrev:** Exper Techniques in Mat II

Rationale: Required course for BSMSE. Approved by CECS UG program committee.

### Course Revisions:

College of Computer Engineering and Computer Sciences Course Revisions: - *Approved*

✓ **EMA 3000**                      **Introduction to Polymeric Materials**

*Engineering Polymeric Materials*

PR: EMA 3XXX Thermodynamics of Materials, CHM 2210

Formation, chemistry, and structure in solution and melt. Characteristic and functional properties of industrial and specialty polymers. Polymer Processing Techniques, Polymer matrix composites. *Fall*

**Abbrev:** ~~Introduction to Polymers~~ <sup>ENGINEERING</sup>

Rationale: The revision of this course is needed to support the new BS MSE curriculum. Minor overlap is expected with a graduate course in the chemistry department CHM 5450, which focuses mainly on polymer synthesis methods and characterizations. This modified course will focus more on engineering of polymer materials, particularly, blends, composites, and processing.

✓ **EMA 3012C** **Expt. Tech in Materials I**

PR: EGN 3365 or EMA 3706

Theory and practice of common materials characterization techniques for assessment of mechanical properties and microstructure including hardness, tensile testing, impact testing, optical microscopy, and scanning electron microscopy. *Fall, Spring*

**Abbrev:** Mater. & Mech. Prop. Character

Rationale: Course description and PR are modified to deliver a slightly more narrow breadth of information related to characterization of materials properties.

✓ **EMA 3124** **Design and Selection of Materials** **3**

PR: EGN 3365 or EMA 3706

This course extensively focuses on the relationship between processing, structure and properties of various engineering materials and their selection in engineering design. *Fall*

Rationale: Course PR modified because the course topics, while remaining the same, will be presented without the need for EGM 3601.

✓ **EMA 4223** **Fundamentals of Mechanical Behavior of Materials**

PR: EGN 3365 or EMA 3706

Objective of this course is to get students acquainted with the most important principles of deformation and fracture in a variety of materials including metals, composites, polymers, ceramics, thin film, cellular materials and biomaterials. Our approach will consist of both phenomenological and physical descriptions of elasticity, plasticity, viscoelasticity, creep, fracture and fatigue. *Spring*

Rationale: Course PR modified because the course topics, while remaining the same, will be presented without the need for EGM 3601.

EMA 4413 ✓

**Fundamentals of Electronic Materials**

**3(3,0)**

PR: EGN 3365 or EMA 3706, and EGN 3373

Fundamentals of electrical circuits and analysis; fundamentals of electronics and AC power systems, transformers, electromechanics and rotating machines. *Spring*

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Rationale: Course PR modified because the course topics, while remaining the same, will be presented without the need for PHY 3101.