

**MINUTES**  
**GRADUATE CURRICULUM COMMITTEE**  
**OCTOBER 10, 2019**  
**238 GRADUATE LIFE CENTER, 2:15-4:15PM**

**Present:** Madlyn Frisard (Chair); Nicole Akers (University Registrar non-voting); Gary Costello (University Registrar non-voting); Rachel Diana (Science); William Huckle (Graduate School); Alexander Leonessa (Engineering); Thomas Skuzinski (CAUS); John Tedesco (Liberal Arts & Human Sciences).

**Absent:** Reza Barkhi for Linda Wallace (College of Business); Sheryl Coutermarsh-Ott (Veterinary Medicine); Jason Holliday (Natural Resources & Environment).

**Visitors:** Gary Kinder (BC); Chandan Reddy (CS); Brian Romans (GEOS); Brian Strahm (FREC); Jay Wilkins (SOE).

The meeting was called to order at **2:15 PM** by, Madlyn Frisard, Chair.

A motion to adopt the agenda was made, seconded, and approved.

**ANNOUNCEMENT OF APPROVAL AND POSTING OF MINUTES**

Announcement of approval of minutes: September 26, 2019– Minutes voted on electronically

**Old Business:**

**College of Engineering**

**Course:** BMES 5614 Multiscale Cancer Engineering (New) (previously tabled 10/25/18) Spring 2020 (CM-4702)

Motion was made and seconded to **APPROVE** BMES 5614 Multiscale Cancer Engineering (New) (previously tabled 10/25/18) Spring 2020 (CM-4702) **with minor required modification:**

- Learning Objective 3: Edit “Debate” to “Evaluate”

**Motion passed unanimously.**

**New Business:**

**College of Architecture and Urban Studies**

**Course:** CNST 5304 Construction Safety Leadership (New) Spring 2020 (CM-5381)

Motion was made and seconded to **TABLE** CNST 5304 Construction Safety Leadership (New) Spring 2020 (CM-5381) **with major required modifications:**

- Note: Consider whether “Leadership” should be in the course title and ADP title. If so, align course with leadership concepts and human factors
- Justification
  - Paragraph 2: Edit to read “Department of Population Health Sciences”
  - Paragraph 3: Incorporate “professional training”
  - Paragraph 4: Begin with “Course is taught at the 5000-level because...” and change “her” to “students”

**Motion passed unanimously.**

## **College of Engineering**

**Course:** BMES 5604 Cancer Detection and Therapeutics (New) Spring 2020 (CM-5234)

Motion was made and seconded to **TABLE** BMES 5604 Cancer Detection and Therapeutics (New) Spring 2020 (CM-5234) **with major required modifications:**

- Learning Objectives
  - Objective 3: Change “Investigate” to “Describe”
  - Objective 5: Change “Determine” to “Explain”
  - Objective 7: Change “Discover” to “Describe”
  - Objective 11: Change “Measure” to “Describe”
  - Objective 12: Change “Discover” to “Analyze”
- Justification
  - Paragraph 3
    - Delete “Graduate credit is required by this course” to begin with “Course is taught...”
    - Delete “highly” in the last sentence
- Texts and Special Teaching Aids
  - Edit links to citations in APA or MLA format, for example:  
**APA** - Author Last name, Initials & Author last name, Initials. (Year of publication). *Title of work in italics with only first word capitalized.* Location: Publisher. pp.  
**MLA** – Author Last name, First name. *Title of work in italics or CAPS.* Location: Publisher, Year of publication. pp.
- Topic Syllabus: Edit to only include topics of study by removing verbs
  - Topic 1: Delete “Evaluation of the” and begin with “Complexities/characteristics of cancer”
    - “Processes that control growth, differentiation, and organization of normal tissues”
    - “Disease/degenerative processes impacting normal tissues”
    - “Mechanistic aspects of cancer cell evolution”
    - “Kinetics control elements and paradigms”

- Topic 2: Delete “Assessment of” and begin with “Cancer progression and metastasis”
- Topic 3: Delete “Discovery of” and begin with “Current methods of tumor modeling”
- Topic 4: Delete “Assessment of” and begin with “Cancer diagnosis methods”
  - “Biopsy”
  - “Pathology”
  - “Medical imaging”
- Topic 5: Delete “Evolution of” and begin with “Cancer therapies”
  - “Surgery and transplantation”
  - “Energy-based therapies”
  - “Chemotherapeutic and immunotherapy agents”
- Topic 6: Delete “Discovery of” and begin with “Decision-making strategies for tumor therapy”

**Motion passed unanimously.**

**Course:** CEE 5440 Instrumentation and Signal Processing for Civil Engineering Applications (New) Spring 2020 (CM-5291)

Motion was made and seconded to **APPROVE** CEE 5440 Instrumentation and Signal Processing for Civil Engineering Applications (New) Spring 2020 (CM-5291) **with minor required modifications:**

- Learning Objective 2: Edit “systems” to “system”
- Required Texts: Arrange citations alphabetically

**Motion passed unanimously.**

**Course:** CS 5814 Introduction to Deep Learning (New) Spring 2020 (CM-5290)

Motion was made and seconded to **APPROVE** CS 5814 Introduction to Deep Learning (New) Spring 2020 (CM-5290) **with minor required modifications:**

- Justification: Include statement about this course being more “instructor-led” whereas ECE 6524 is research based.
- Required Texts: Arrange citations alphabetically

**Motion passed unanimously.**

**Course:** ISE 5804 Fundamentals of Systems Engineering (New) Fall 2020 (CM-4704)

Motion was made and seconded to **APPROVE** ISE 5804 Fundamentals of Systems Engineering (New) Fall 2020 (CM-4704) **with minor required modifications:**

- Catalog Description
  - Delete “Understanding the” and begin with “Fundamental aspects....”

- Fourth sentence: Edit to read “Systems engineering as an engineering discipline, study and application of...”

**Motion passed unanimously.**

**Course:** ISE 5844 Healthcare Systems Engineering and Modeling (New) Spring 2020 (CM-5236)

Motion was made and seconded to **APPROVE** ISE 5844 Healthcare Systems Engineering and Modeling (New) Spring 2020 (CM-5236) **with minor required modifications:**

- Catalog Description: Line 4 states “designing policy interventions” but Learning Objective 5 states “Identify policy interventions.” Please clarify.
- Learning Objectives
  - Objective 1: Edit to read “Describe the primary characteristics of healthcare systems generally and in the U.S.”
  - Objective 2: Edit to read “Analyze healthcare system outcomes using key performance measures”
  - Objective 3: Edit to read “Apply systems thinking and system dynamics in the healthcare context”
  - Objective 4: Clarify the phrase “dynamic hypotheses” which does not appear elsewhere in the proposal
  - Objective 5: As noted, please clarify whether objective should begin with “identify” or “design”
  - Objective 6: Edit “in to” to read “into”
  - Objective 7: Edit "health" to "healthcare"
- Justification
  - Paragraph 1: Begin with “The healthcare sector...”
    - Line 5: Edit to read “...it may take a couple of months...”
    - Line 9: Edit to read “...the healthcare system...”
  - Paragraph 2/ line 2: Edit to read “...will provide interested Virginia Tech students...”
  - Paragraph 3: Line 1 states “...students taking the course will be refining and applying graduate-level course content...” but there are no graduate-level course prerequisites. Will this course build upon undergraduate-level course work?
- Texts and Special Teaching Aids: Please include header “Recommended” over journal articles and list examples in APA or MLA format
- Topic Syllabus
  - Apply consistent use of capitalization throughout
  - Apply consistent use of “system” or “systems” throughout
  - Topic 1
    - Subtopic 2: Edit to read “Resource inputs of the US...”
    - Subtopic 3: Edit to read “Processes policy of the US healthcare system”

**Motion passed unanimously.**

### **College of Liberal Arts and Human Sciences**

**Course:** EDCI 5605-5606 Leadership in Mathematics Education (New) Spring 2020 (CM-5327)

Motion was made and seconded to **APPROVE** EDCI 5605-5606 Leadership in Mathematics Education (New) Spring 2020 (CM-5327) **with minor required modifications:**

- Catalog Description: Include sentence before “5605” that clarifies the leadership aspect of the course
- Topic Syllabus/ 5606: Incorporate “leadership” into topics

**Motion passed unanimously.**

**Course:** EDCO 5344 Systems Counseling (New) Spring 2020 (CM-5299)

Motion was made and seconded to **APPROVE** EDCO 5344 Systems Counseling (New) Spring 2020 (CM-5299) **with no modifications.**

**Motion passed unanimously.**

### **College of Natural Resources and Environment**

**Course:** FREC 5354 Soil Science and Biogeochemistry (Revised) Spring 2020 (CM-5320)

Motion was made and seconded to **APPROVE** FREC 5354 Soil Science and Biogeochemistry (Revised) Spring 2020 (CM-5320) **with no modifications.**

**Motion passed unanimously.**

### **College of Science**

**Course:** GEOS 5264 Advanced Sedimentary Basins (New) Fall 2020 (CM-5386)

Motion was made and seconded to **APPROVE** GEOS 5264 Advanced Sedimentary Basins (New) Fall 2020 (CM-5386) **with minor required modifications:**

- Learning Objective 8: Edit to read “Synthesize research literature for discussion/ presentation”

- Justification/ Paragraph 1: Include statement “This course is necessary at VT because no other courses accomplish this interdisciplinary approach to study of basins.”

**Motion passed unanimously.**

**ADJOURNMENT**

A motion was made and seconded to adjourn the meeting at **4:15 PM.**

Respectfully Submitted,  
Nicole Akers  
*Office of the University Registrar*