MINUTES
GRADUATE CURRICULUM COMMITTEE
APRIL 9, 2020
VIA ZOOM, 2:15 PM

Present: Madlyn Frisard (Chair); Nicole Akers (University Registrar non-voting); Gary Costello (University Registrar non-voting); Rachel Diana (Science); William Huckle (Graduate School); John Tedesco (Liberal Arts & Human Sciences); Linda Wallace (Business).

Absent: Sheryl Coutermarsh-Ott (Veterinary Medicine); Jason Holliday (Natural Resources & Environment)

Visitors: Nancy Bodenhorn (SOE); Serkan Gugercin (MATH); Jennifer Jones (ALS); Tamara Knott (ENGE); Todd Schenk (SPIA); Junsong Zhu (BCHM)

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.

A motion was made and seconded to modify the voting process to only ask for opposed votes and abstentions. The motion to modify the voting process to only ask for opposed votes and abstentions passed unanimously.

New Business:

College of Agriculture & Life Sciences

Course: ALS 5104 Communicating Research and Leadership in Agriculture and Life Sciences (New) Fall 2020 (CM-6037)

Motion was made and seconded to **APPROVE** ALS 5104 Communicating Research and Leadership in Agriculture and Life Sciences (New) Fall 2020 (CM-6037) **with minor required modifications**:

- Learning Objectives
  - Objective 3: Edit to read "Analyze a relevant research topic"
- Justification
  - Paragraph 1: Begin with "Students need graduate level content...."
  - Paragraph 2: Begin with "This course is taught at the 5000-level because students need to be proficient…" and include whether students need an undergraduate background in the field.
- Texts and Special Teaching Aids
  - Edit citation 3 to capitalize "Enhancing"
  - Edit citation 4 to include page numbers
- Topic Syllabus
  - Topic1/Subtopic 2: Lowercase "leadership"
  - Topic 2: Edit to read "Research distillation and translation"
  - Topic 4: Lowercase "research" and "society"

Motion passed unanimously.

Course: BCHM 5204 Molecular Biology of Eukaryotic Gene Expression (New) Spring 2021 (CM-5869)

Motion was made and seconded to **APPROVE** BCHM 5204 Molecular Biology of Eukaryotic Gene Expression (New) Spring 2021 (CM-5869) **with required modifications**:

- Learning Objectives
  - Objective 5: Begin with "Explain"
- Justification
  - Paragraph 1: Edit to read "One of the main challenges for graduate students in the life sciences is to connect basic concepts to current and novel experimental approaches in their fields. This course will support such a connection in the area of gene expression and regulation in eukaryotes. This course will also address the urgent need for students to exhibit a broader critical reflection to find meaning in large datasets (omics data). In addition to strengthening students' understanding of the foundational concepts, this course will develop their ability to independently solve practical problems related to eukaryotic gene expression.
  - Paragraph 2: Edit to read "This course is taught at the 5000-level because students need a strong undergraduate background in the areas of biochemistry, cell biology, and molecular biology in order to understand the initial concepts in this course...."

Motion passed unanimously.

College of Architecture & Urban Studies

Course: SPIA 5124 (PSCI 5124) (STS 5124) Decision Making, Reflective Practice, and Engagement in STEM-H Domains (New) Fall 2020 (CM-6032)

Motion was made and seconded to **APPROVE** SPIA 5124 (PSCI 5124) (STS 5124) Decision Making, Reflective Practice, and Engagement in STEM-H Domains (New) Fall 2020 (CM-6032) **with minor required modifications**:

- Improve overall alignment between Catalog Description, Learning Objectives, and Topic Syllabus
- Learning Objectives: Include objective to emphasize "policy" and "big data"
  - Objective 4: Change verb
- Topic Syllabus: Include topic to emphasize "policy making"

Motion passed unanimously.

College of Engineering

Course: CEE 6514 Dynamics of Soils and Foundations (New) Spring 2021 (CM-5698)

Motion was made and seconded to **APPROVE** CEE 6514 Dynamics of Soils and Foundations (New) Spring 2021 (CM-5698) **with minor required modifications**:

- Justification
    - Paragraph 2: Remove the word "of" after because (*This course is taught at the 6000-level because the numerical…*)
- Texts and Special Teaching Aids
    - Example 2: Capitalize "State"

Motion passed unanimously.

Course: ENGE 5214 Issues in Engineering Education (New) Fall 2020 (CM-5998)

Motion was made and seconded to **APPROVE** ENGE 5214 Issues in Engineering Education (New) Fall 2020 (CM-5998) **with minor required modifications**:

- Catalog Description: Edit to begin "Current Issues in Engineering Education" Remove "explore" and reword second sentence.
- Learning Objectives
    - Improve alignment with Topic Syllabus. Pull the four main topics into objectives to make them more specific
    - Objective 3: Add "such as Transformative Practice, Teaching and Learning, Emerging Issues, Broadening Participation"
- Texts and Special Teaching Aids
    - Remove "through the learning management system"
    - Consider providing journal article examples
- Topic Syllabus
    - Topic 3: Add subtopic of "engineering education theory and practice"
    - Topic 4: Consider whether "Engineering Education" should be capitalized and make it consistent through proposal

With approval of ENGE 5214 Issues in Engineering Education & ENGE 5224 Disciplinary Literacy: Theorizing and Writing in Engineering Education, ***discontinue*** *ENGE 5014 Foundations of Engineering Education*

Motion passed unanimously.

Course: ENGE 5224 Disciplinary Literacy: Theorizing and Writing in Engineering Education (New) Fall 2020 (CM-5999)

Motion was made and seconded to **APPROVE** ENGE 5224 Disciplinary Literacy: Theorizing and Writing in Engineering Education (New) Fall 2020 (CM-5999) **with required modifications**:

- Catalog Description
    - Clarify "disciplinary ways of thinking" or remove
    - Clarify "role of writing in communicating"
    - Remove "focusing on theorizing and writing"

    - Remove "Ways of approaching and applying" and begin with "Theory"
    - Edit "The role of writing in communicating engineering education research" to "Communicating engineering education research via writing"
- Learning Objectives
    - Use higher-level verbs
    - Objective 1: Split into two objectives
    - Objective 2: Edit "rhetorical structures" to "rhetorical patterns"
    - Objective 3: Edit to read "Revise written work to improve its clarity, coherence, and conciseness"
    - Objective 4: Edit to read "Observe how paradigms, theoretical frameworks, and conceptual frameworks are employed in engineering education research"
    - Objective 5: Include "paradigms and conceptual frameworks"
    - Objective 6: Edit to read "Synthesize research studies on a relevant topic or issue in engineering education"
- Justification
    - Paragraph 2: Begin "This course is taught at the 5000-level because it requires deep knowledge of engineering concepts from undergraduate study and the ability to apply ideas and theories from social science to those concepts. It is…"
- Topic Syllabus
    - Topic 1: "Approaches to reading" is not in the Catalog Description or Learning Objectives; include or remove from Topic Syllabus

With approval of ENGE 5214 Issues in Engineering Education & ENGE 5224 Disciplinary Literacy: Theorizing and Writing in Engineering Education, ***discontinue*** *ENGE 5014 Foundations of Engineering Education*

Motion passed unanimously.

Course: ISE 5654 Human Factors System Design (New) Fall 2020 (CM-5997)

Motion was made and seconded to **APPROVE** ISE 5654 Human Factors System Design (New) Fall 2020 (CM-5997) **with minor required modifications**:

- Learning Objectives
    - Objective 4: Edit to read "Design or redesign the features of a novel product that successfully…"
- Justification
    - Paragraph 1: Delete sentence two beginning "An overview is provided…" and focus justification on why this course is needed
    - Paragraph 2: Condense to first and last sentence.

With approval of ISE 5654 Human Factors System Design, discontinue ISE 5605-5606 Human Factors Systems Design

Motion passed unanimously.

College of Liberal Arts & Human Sciences

Course: EDRE 6674 Longitudinal Data Analysis (New) Spring 2021 (CM-6002)

Motion was made and seconded to **APPROVE** EDRE 6674 Longitudinal Data Analysis (New) Spring 2021 (CM-6002) **with minor required modifications**:

- Catalog Description
  - Write in phrases; consider paraphrasing objectives
  - Add "Research report strategies and styles"
- Learning Objectives
  - Objectives 2-5 were not clear in Catalog Description
  - Objective 5: Consider "Summarize research in the field" or "Synthesize existing research through a written deliverable"
- Justification
  - Paragraph 2: Expand the knowledge and skills students will learn in prerequisite course to prepare students
- Prerequisite: Edit to read "Pre: 6634 Advanced Statistics for Education"
- Texts and Special Teaching Aids
  - Include page numbers for last two references

Motion passed unanimously.

Course: PSCI 5104 (SPIA 5104) (STS 5104) Policy Gateway: Policy and Decision Making in Scientific Domains (New) Fall 2020 (CM-6003)

Motion was made and seconded to **APPROVE with minor required modifications**:

- Improve overall alignment between Catalog Description, Learning Objectives, and Topic Syllabus
- Catalog Description
  - Add Engineering ("…science, technology, engineering...")
- Learning Objectives
  - Include "Relationship among public policy" from Catalog Description
- Justification
  - Paragraph 2: Edit to read "Course is taught at the 5000-level because students are expected to have a foundational knowledge of the key theories and methodologies prevalent in Public Affairs or STEM-H core fields. Students are also expected to be working on a preliminary research topic in either Public Affairs or STEM-H."

Motion passed unanimously.

College of Natural Resources & Environment

Course: GEOG 5514G Advanced Tropical Meteorology (New) Fall 2020 (CM-6015)

Motion was made and seconded to **APPROVE** GEOG 5514G Advanced Tropical Meteorology (New) Fall 2020 (CM-6015) **with minor required modifications**:

- Learning Objectives
  - Objective 6: End at "climate."
  - Objective 7: Edit to read "Analyze peer reviewed research in the subfield of tropical meteorology research."
- Justification
  - Paragraph 2: Edit to read "This course is taught at the 5000-level because it builds upon undergraduate skills and knowledge in tropical meteorology and acclimatization."

*Course is conjoint with GEOG 4514 Tropical Meteorology

Motion passed unanimously.

A motion was made and seconded to extend the meeting by 15 minutes. The motion to extend the meeting passed unanimously.

College of Science

Course: ECON 5144 Antitrust and Regulation (New) Spring 2021 (CM-6014)

Motion was made and seconded to **APPROVE** ECON 5144 Antitrust and Regulation (New) Spring 2021 (CM-6014) **with a minor modification**:

- Justification
  - Paragraph 1: Expand why this course is needed.

Motion passed unanimously.

Course: ECON 5154 Empirical Industrial Organization (New) Fall 2020 (CM-6028)

Motion was made and seconded to **APPROVE** ECON 5154 Empirical Industrial Organization (New) Fall 2020 (CM-6028) **with a minor modification**:

- Justification
  - Paragraph 2: Edit to read "The course is taught at the 5000 level because students taking this course are expected to have working knowledge of microeconomic theory, including consumer theory, producer theory, and game theory. It would be relevant to graduate students pursuing a master's degree in applied economics or a related discipline."

Motion passed unanimously.

Course: MATH 5564 Model Reduction: System-Theoretic Methods (New) Fall 2020 (CM-5925)

Motion was made and seconded to **APPROVE** MATH 5564 Model Reduction: System-Theoretic Methods (New) Fall 2020 (CM-5925) **with minor required modifications**:

- Learning Objectives
    - Objective 1: Edit to read "Assess system performance and model reduction..."
    - Objective 2: Edit to read "Apply the concept of reachability when applying balanced truncation"
    - Objective 7: Remove "such as balanced truncation and interpolatory methods"

Motion passed unanimously.

Course: STAT 5134 (SPIA 5134) (PSCI 5134) Tools and Approaches for Policy-Making in STEM-H Domains (New) Fall 2020 (CM-6029)

Motion was made and seconded to **APPROVE** STAT 5134 (SPIA 5134) (PSCI 5134) Tools and Approaches for Policy-Making in STEM-H Domains (New) Fall 2020 (CM-6029) **with minor required modifications**:

- Learning Objectives
    - Objective 4: Edit to read "Interpret the results for practitioners…" or begin with "Communicate…"
- Justification
    - Paragraph 2: Edit to read "...dominant in STEM-H fields, Political Science, or Public Policy..."
- Texts and Special Teaching Aids
    - Add space between the authors initials

Motion passed unanimously.

ADJOURNMENT

A motion was made and seconded to adjourn the meeting at **4:30 PM**.

Respectfully Submitted,
Nicole Akers
Office of the University Registrar