The University Curriculum Committee

Meeting Minutes
Thursday, October 8, 2015

Regular Members Present
David Batts
Lori Flint, Chair
Gail Ratcliff
Mark Richardson
Jean-Luc Scemama

Ex-Officio Members Present
Josie Bowman
Rita Reaves
Patrick Rider
Nancy Winterbauer
Chase Crawford, SGA representative

Other Members Present
Karen Traynor, Office of Academic Program
Planning & Development
Diane Coltraine, Office of the Registrar

Guest
Karen Summey, Office of Academic Program
Planning & Development

Regular Members Excused
Michael Dingfelder

Ex-Officio Members Excused
Christine Zoller

Actions of Committee:
*Items identified with yellow highlighting are programmatic in nature and will require review by the EPPC following UCC approval.*

I. Call to Order/Announcements

Meeting was called to order at 2:00 PM by Lori Flint and members were welcomed.

1. The 9/24/15 minutes will be distributed for an electronic vote once all of the revision packages have been received
   - Discussion: Minutes discussed and edits were suggested.
   - Action Taken: The revised minutes will be available to faculty to review and vote along with attached catalog page.

II. Thomas Harriot College of Arts and Sciences, Department of Physics

1. Memorandum of Request
   - Discussion: Well written and organized memo.
   - Action Taken: Dr. Ratcliff: In the third paragraph, the statement that the required courses overlap completely is confusing. Dr. Sprague will clarify the statement. Need to state that the physics faculty voted and approved the following requests that are listed in the memo. Make sure that it is evident that all aspects were approved. Date the memo using the date that the college committee met and the memo should be addressed to UCC.

2. Proposal of a new course PHYS 4410 - Quantum Physics
   - Discussion: Change or make sure the dates correspond on memo and course proposal. Course will be offered for those students that will be going to graduate school. The pre-requisites will
be changed later, when the department updates all their course numbers. Textbook is dated but it is considered a new text in the field. Curriculum plan will be decreased to 120 hours.

3. Proposals for three New Concentrations within the BS in Physics Degree: Research, Professional, Practical

   Discussion: The above concentrations were discussed and the changes made on the catalog pages--which were reviewed by Diane Coltraine. The courses are taught on a two-year cycle. One typo noted on line 53 and that will be corrected. One edit for strike through will be corrected. One change also needed is the update of the contact for Interim Chair. Signature form is correct.
   Action Taken: Approve as amended.

4. Discontinue of an existing Course PHYS 5410

   Discussion: Request to delete existing course was reviewed.

5. Revision of an existing Degree: BS in Physics (BS in Applied Physics and BA in Physics consolidating into BS in Physics Degree; credit hour requirement from 126 to 120)

   Discussion: Dr. Sprague shared rationale for changes in existing degree and one reason is the continued presence on the low productivity report. The plan is to combine all the undergraduate programs and identify them as concentrations. All affected units were notified.

6. Discontinue BS in Applied Physics Degree

   Discussion: Reviewed teach out plan. It will be BS in Physics and then they will have three concentrations. No concerns with teach out plan.

7. Discontinue BA in Physics Degree

   Discussion: No concerns with teach out plan. Need to add contact information on the form.
   Action Taken: The whole packet was approved as amended unanimously. Send changes back to UCC mail box. The packet will go to EPPC on Friday to move the packet along.

III. Catalog Cleanup of Courses Banked Five or More Years – moved to 10-08-15 agenda

1. Banked Courses Cleanup Process

   By October 1st, the UCC Chair, or designee, will distribute a notification memorandum to all units summarizing the intent to delete the identified banked courses as a catalog cleanup action. Units desiring to keep their banked courses will be given an opportunity to submit a justification memorandum to the UCC via cucsubmissions@ecu.edu. Describing why their course(s) should remain banked. The deadline for justification memoranda submissions will be November 1st (deadline has been extended, pending ITCS delivery).

   Discussion: Continuing to work on report
   Action Taken: Will be reviewed and discussed when available.

IV. Old Business

1. Setting Goals for 2015-2016

   Discussion: Some suggested goals were:
   - Investigate use of Curriculog for fiscal sustainability to improve efficiency.
   - Review and assist the faculty in curriculum development
   - Renaming the committee to Undergraduate Curriculum Committee
Action Taken: Any other goals were to be sent to the officers.

V. New Business

1. Curriculog: Gail Ratcliff reports: Curriculog is initiated by a faculty member when a change in the curriculum is needed or planned. A flow chart shows which document you need to produce. Affected units receive an e-mail about the change. Each person on the signature list gets an e-mail, in turn, for sign-off. The agenda and the minutes are produced by the system. It will be used by both UCC and GCC. It will save time and money. Initial cost $120,000 and $20,000 per year. Karen Traynor will give a presentation at the next meeting.

2. Faculty Senate Presentation: Lori Flint talked about presentation at Faculty Senate and she will send a memo to the Committee on Committee to initiate and receive approval of the change in the committee title.

VI. Adjournment

Dr. Ratcliff made a motion to adjourn at 3:07 PM. The motion passed and the meeting was adjourned.

Meeting Adjourned: 3:07 PM

NEXT MEETING: October 22, 2015 in Brody SOM.

Respectfully Submitted by
Josie Bowman for Gail Ratcliff, Secretary of the UCC
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<th>Curricular Actions Reviewed</th>
<th>At this meeting</th>
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<td>New bachelor’s degrees (Phase II - development)</td>
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<td>Prefix Revision of an Entire Course List</td>
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PHYS 4410 - Quantum Physics
3 S
P: PHYS 4417, PHYS 4560; or consent of instructor. Survey of the fundamental principles of quantum mechanics and their application to the solution of selected problems in atomic, molecular, condensed matter, and biological physics.
Applied Physics, BSAP

The BSAP is designed for students interested in employment in technical fields or in graduate study in engineering, business, public health, medicine, environmental science, and related technical fields depending on elective choices. Minimum degree requirement is 126 s.h. of credit as follows:

1. Foundations curriculum including those listed below—42 s.h.

(For information about courses that carry foundations curriculum credit see Liberal Arts Foundations Curriculum.)

- CHEM 1150—General Chemistry I
- CHEM 1151—General Chemistry Laboratory I
- CHEM 1160—General Chemistry II
- CHEM 1161—General Chemistry Laboratory II
- MATH 1065—College Algebra or equivalent

2. Core—28 s.h.

- PHYS 1251—General Physics Laboratory
- PHYS 1261—General Physics Laboratory
- PHYS 2350—University Physics
- PHYS 2360—University Physics
- PHYS 3700—Advanced Laboratory
- PHYS 3701—Advanced Laboratory
• PHYS 4310 – Modern Optics
• PHYS 4416 – Modern Physics I
• PHYS 4417 – Modern Physics II
• PHYS 4610 – Electronics
• Choose 3 s.h. of PHYS electives above 2999

3. Cognates – 18 s.h.
• MATH 1083 – Introduction to Functions
• MATH 2171 – Calculus I
• MATH 2172 – Calculus II
• MATH 2173 – Calculus III
• MATH 4331 – Introduction to Ordinary Differential Equations

4. Minor and general electives to complete requirements for graduation.

http://catalog.ecu.edu/preview_program.php?catoid=8&poid=1808

Physics, BA

The BA is designed for students interested in employment in nontechnical fields or in graduate study in the social sciences, medicine, public health, business, and the humanities depending on elective choices. Minimum degree requirement is 126 s.h. of credit as follows:

1. Foundations curriculum requirements including those listed below—42 s.h.

(For information about courses that carry foundations curriculum credit see Liberal Arts Foundations Curriculum.)

• MATH 1065 – College Algebra or equivalent

2. Demonstrated foreign language proficiency through level 1004—12 s.h.

(For information about the foreign language requirement see Additional Requirements for BA Degree and Placement Testing, Foreign Language.)

3. Core—19 s.h.

• PHYS 1251 – General Physics Laboratory
• PHYS 1261 – General Physics Laboratory
• PHYS 2350 – University Physics
• PHYS 2360 – University Physics
• PHYS 3700 – Advanced Laboratory
• PHYS 3701 – Advanced Laboratory
• PHYS 4416 – Modern Physics I
• PHYS 4417 – Modern Physics II

4. Cognates – 15 s.h.

• MATH 1083 – Introduction to Functions
• MATH 2171 – Calculus I
• MATH 2172 – Calculus II
• MATH 2173 – Calculus III

5. Minor and electives to complete requirements for graduation.

http://catalog.ecu.edu/preview_program.php?catoid=8&poid=1809
Physics, BS

The BS is a traditional physics program designed for students interested in graduate study in physics or engineering. The bachelor of science in physics has three concentrations – practical, professional, and research. The practical concentration is for students interested in entry into business fields requiring a technical background or in graduate study in business, education, the humanities, or the social sciences, depending on elective choices. The professional concentration is for students interested in employment in technical fields, teaching physics and physical science in secondary schools, or in graduate study in health fields (e.g. dentistry, medicine, and physical therapy), business, engineering, environmental science, or related technical fields, depending on elective choices. The research concentration is for students interested in graduate study in physics.

Minimum degree requirement is **126 120** s.h. of credit as follows:

1. **Foundations curriculum including those listed below** - 42 s.h.

   (For information about courses that carry foundations curriculum credit see *Liberal Arts Foundations Curriculum*)

   - CHEM 1150 – General Chemistry I
   - CHEM 1151 – General Chemistry Laboratory I
   - CHEM 1160 – General Chemistry II
   - CHEM 1161 – General Chemistry Laboratory II
   - MATH 1065 – College Algebra or equivalent

   **Practical Concentration:**

   - MATH 1065 - College Algebra or equivalent course

   **Professional Concentration:**

   - CHEM 1150 - General Chemistry I
   - CHEM 1151 - General Chemistry Laboratory I
   - CHEM 1160 - General Chemistry II
   - CHEM 1161 - General Chemistry Laboratory II
   - MATH 1065 - College Algebra or equivalent course

   **Research Concentration:**

   - CHEM 1150 - General Chemistry I
   - CHEM 1151 - General Chemistry Laboratory I
   - CHEM 1160 - General Chemistry II
   - CHEM 1161 - General Chemistry Laboratory II
   - MATH 1065 - College Algebra or equivalent

2. **Core** – 40 s.h.

   - PHYS 1251 – General Physics Laboratory
   - PHYS 1261 – General Physics Laboratory
   - PHYS 2350 – University Physics
   - PHYS 2360 – University Physics
2. Concentrations
(Choose one of the following areas of concentration.)

Practical (22 s. h.):

- PHYS 1251 - General Physics Laboratory
- PHYS 1261 - General Physics Laboratory
- PHYS 2350 - University Physics
- PHYS 2360 - University Physics
- PHYS 3700 - Advanced Laboratory
- PHYS 3701 - Advanced Laboratory
- PHYS 4416 - Modern Physics I
- PHYS 4417 - Modern Physics II
- Choose 3 s. h. of PHYS electives above 2999

Professional (28 s. h.):

- PHYS 1251 - General Physics Laboratory
- PHYS 1261 - General Physics Laboratory
- PHYS 2350 - University Physics
- PHYS 2360 - University Physics
- PHYS 3700 - Advanced Laboratory
- PHYS 3701 - Advanced Laboratory
- PHYS 4416 - Modern Physics I
- PHYS 4417 - Modern Physics II
- Choose 9 s. h. of electives

Note: Electives can include PHYS courses above 2999 and/or CHEM 3950. A maximum of 3 s. h. of independent study courses (PHYS 3516, PHYS 3517, PHYS 3518, PHYS 3716, PHYS 3717, and PHYS 3718) can be used to fulfill the 9 s. h. of electives requirement.

Research (40 s.h.):

- PHYS 1251 - General Physics Laboratory
- PHYS 1261 - General Physics Laboratory
- PHYS 2350 - University Physics
- PHYS 2360 - University Physics
- PHYS 3700 - Advanced Laboratory
- PHYS 3701 - Advanced Laboratory
- PHYS 4120 - Thermodynamics
- PHYS 4226 - Mechanics I
- PHYS 4326 - Electricity and Magnetism I
- PHYS 4410 - Quantum Physics
- PHYS 4416 - Modern Physics I
- PHYS 4417 - Modern Physics II
- PHYS 4560 - Mathematical Methods for Physics
- Choose 6 s. h. of PHYS electives above 2999

**Note:** Electives can include a maximum of 3 s. h. of independent study courses (PHYS 3516, PHYS 3517, PHYS 3518, PHYS 3716, PHYS 3717, and PHYS 3718).

3. Cognates - 15 -18 s. h.

(Choose a set of cognates according to selected area of concentration.)

- **MATH 1083** - Introduction to Functions
- **MATH 2171** - Calculus I
- **MATH 2172** - Calculus II
- **MATH 2173** - Calculus III
- **MATH 4331** - Introduction to Ordinary Differential Equations

**Practical Concentration - 15 s. h.**

- **MATH 1083** - Introduction to Functions
- **MATH 2171** - Calculus I
- **MATH 2172** - Calculus II
- **MATH 2173** - Calculus III

**Professional Concentration - 18 s. h.**

- **MATH 1083** - Introduction to Functions
- **MATH 2171** - Calculus I
- **MATH 2172** - Calculus II
- **MATH 2173** - Calculus III
- **MATH 4331** - Introduction to Ordinary Differential Equations

**Research Concentration - 18 s. h.**

- **MATH 1083** - Introduction to Functions
- **MATH 2171** - Calculus I
- **MATH 2172** - Calculus II
- **MATH 2173** - Calculus III
- **MATH 4331** - Introduction to Ordinary Differential Equations

-4. Electives to complete requirements for graduation.