

UTC 2015 Reorganization: Department of Chemistry & Department of Physics
(revised 2015.07.31)

Chancellor Angle's Budget Rebalancing Report of April 10, 2015 stated:

Physics, Geology and Astronomy Department realignment

The disciplines in the current department are important to the academic offering of the university. We must take the necessary steps to protect and strengthen these disciplines. Any savings would reduce the cost to produce majors and would be viewed very favorably by campus, the System and the UT Board of Trustees. The realignment would include moving Astronomy and Physics to Chemistry and Geology to Biology and Environmental Sciences. The Provost will work with the department heads of Chemistry and Biological and Environmental Sciences and the CAS dean to ensure a smooth transition to develop a budget for the moves and balance this with potential savings.

Some of the issues to be addressed include:

- Involvement of faculty and staff in the process
- Budget
- Ways to increase majors, especially in Physics
- Space and location of Geology faculty in Biological and Environmental Sciences
- Review of departmental bylaws
- Appropriate names for the merged departments

Timeline: Decision completed by September 2015

Plan: Provost Ainsworth requested plans from each affected academic area. Dean Elwell requested written realignment plan to him in May for discussion and then document would go to Provost Ainsworth. Our areas are related to Chancellor's comments given above but do not include Geology.

This is a plan to facilitate the administrative linking of UTC's of Physics (PHYS) with the Department of Chemistry (CHEM). Each department has three degree concentrations, giving the following degree choices: BS Chemistry, BS CHEM:Biochemistry, BS CHEM STEM, BS PHYS, BS PHYS:Biophysics, BS PHYS STEM. PHYS faculty also teach the Astronomy courses (ASTR) and the General Science Courses (GNSC). These courses, along with PHYS and CHEM courses, make a significant contribution to required Natural Science course offerings at UTC. These courses also contribute to the very high student credit hour (SCH) production of CHEM and PHYS departments.

Faculty and Staff Involvement: They have been involved, and will continue to be involved, in developing the departmental linkage details through group and individual

meetings and face-to-face discussions and email. Because the current head of Chemistry will become head of Physics, many of the specific detailed meetings and changes or discussions are primarily associated with Physics rather than with Chemistry.

Budget: The State budget lines will be combined. A relative proportionality of usage would be expected based on the combining budgets. However, Chemistry and Physics lab fees will remain separate. Chemistry and Physics scholarship accounts will remain separate. Gift fund accounts will remain separate and used for their designated purpose.

In addition to the 23 active Chemistry accounts, there are 11 Physics accounts including:

E041060-*Physics and Astronomy*

E041060001-*Physics and Astronomy Lab Fees*

R041060041-*UC FDN Physics and Astronomy Program Fund*

R041060042-*Physics and Astronomy Gift Fund*

R041060054-*UCF Fund for Physics and Astronomy*

R041060033-*UC FDN Clarence Jones Prize Scholarship*

R041060046-*Harold Marlowe Scholarship Fund*

R049002039-*UC FDN Akers Physics Endowment*

R049002093-*UC FDN H. B. Deuberry Scholarship*

R049003036-*UC FDN K & H Hujer Scholarship*

R042010001-*UC FDN Ruth Holmberg Faculty Excellence Grant (Joshua Hamblen)*

Ways to Increase Physics Majors: This question will be examined. This consideration could involve an examination of curriculum offerings for efficiency as well as pedagogical value. The gateway course options for Physics should also be considered. Visibility of Physics as a major and career option is important. Issues of recruitment and seeking help from the university in support of talented math and science oriented students should be considered. It must be recognized that there is a central role of Physics in its connection to other science and engineering fields. Also it has been reported that about 70% of the Physics programs in the country produce 5 or fewer majors. While it is not desirable that there are few Physics graduates, it is not necessarily surprising. The head will work with Physics faculty for them to consider these issues.

Space: Programs and faculty will retain their existing space. Physics personnel will maintain their current space and offices and labs. We will not use the office currently occupied by the Physics/Geology Administrative Professional (Kelly Locke).

Updates of equipment may be needed for labs, and modifications in future could be considered that may benefit the program. For example, it may be possible to use two adjacent labs at the same time as a double lab if equipment is adequate. The space available is fairly limited considering the number of sections of introductory PHYS, ASTR, and GNSC that are taught and need for specialized upper level labs. New computer upgrades for the three primary lab rooms will probably be needed soon. Adequate modern equipment for labs and research is always a consideration in science areas.

Bylaws: Faculty will combine the two sets of bylaws into one document that reflects Chemistry and Physics areas where appropriate. For example, while there may be one section on tenure, there would be a Chemistry subsection and a Physics subsection. This would be completed by January 2016.

Separate disciplinary specific criteria and procedures will be retained within the combined bylaws. RTR committee composition will also be addressed in the Bylaws.

Name of Department: The combination will become the **Department of Chemistry and Physics**. The maintenance of aspects of the two areas is vital for disciplinary identity, faculty research, faculty recruitment, student recruitment, graduate placement in jobs or professional schools, and accreditation to name a few issues. For example, Chemistry is accredited by the American Chemical Society committee on Professional Training (ACS-CPT); whereas Physics is reviewed by THEC external review. However, the department will function with an integrated administrative unit that is primarily the Head and Administrative Staff person.

Administrative Structure: Shared head and administrative staff person. Administration will be provided by existing positions plus one new Physics Associate Head. The positions include:

Department Head (Tom Rybolt): Overall departmental oversight and administration, faculty and staff evaluation, departmental petitions, budgets, representation and advocacy for departments.

Associate Head Department of Chemistry and Physics (Manuel Santiago): CHEM course scheduling, overrides, majors list, summer orientation, general backup to Department Head.

Associate Head Department of Chemistry and Physics (*new*, Tatiana Allen): PHYS, ASTR, and GNSC course scheduling, petition help, majors list, overrides, website. Position approved by Dean and Provost, and list of responsibilities prepared in separate document.

Administrative Specialist II (Nancy Tolar): Request to upgrade position to reflect accounting and budget duties has been submitted and approved. Separate list of new duties has been prepared.

Physics Senior Teaching Laboratory Specialist and Clarence T. Jones Observatory Operations Manager (Jack Pitkin): radiation safety, observatory, lab set ups, and assistance in overseeing many of the labs while being taught, physics equipment and supply orders.

Chemistry Laboratory Specialist (Sharon Hardy): chemistry labs set-up and operation especially general, organic, and quantitative analysis, stockroom organization, helping with selected labs, paper work for TA hires

Chemistry Faculty Associate (Jim Narramore): chemical and supply orders, chemical waste management, safety, student TA hires, physical space, teaching duties, etc. Mr. Narramore is taking early retirement, but he has agreed to continue on part-time basis using funds remaining in his salary line. This will give us chance to advertise and seek replacement for this essential position.

Webpage: The Chemistry website portion will continue to be maintained by Titus Albu and Physics website portion now will be maintained by Tatiana Allen. There will be a common administrative linkage with one website for entire department.

Evaluation: The Department Head will conduct EDO evaluations and the RTR committees and Department Head will perform their duties in the faculty reappointment, tenure, and promotion processes. The Department Head will conduct staff evaluations (SPDR).

Major Rosters: Associate Heads will be responsible for generating and maintaining a list of majors for the two disciplines.

Advising: Each discipline will continue to advise its own majors and decide how to best divide advisement assignments. In particular, Chemistry and Physics faculty will continue to advise their respective majors engaged in the STEM concentration for the B.S. in Chemistry or in Physics. Appropriate information about advisors will be placed online and information conveyed to students prior to Advisement sessions.

Course Scheduling: Each Associate Head will work with specific discipline faculty, consult with and get approval from Head, and then will be responsible for scheduling Chemistry courses and Physics courses, respectively. The Physics Associate Head will also schedule the Astronomy and General Science courses that are taught by Physics faculty.

Summer School Teaching: Faculty interest in summer school teaching will be determined and summer schedules developed by Associate Heads in consultation with the Head who in turn will consult with the leadership of the College of Arts and Sciences for budget and other guidelines for summer.

SLO and Assessment: Due to the different disciplines and degree options, there will need to be separate Student Learning Outcomes (SLO), Curriculum Mapping, and annual Assessment Plans. Ideally there would be one assessment plan from each discipline giving a total of two each year. The annual assessment would be carried out by committee or volunteers from each discipline.

Student Events, Retention, Progression, and Graduation: Each discipline will take primary responsibility for the majors within their area and Head having oversight.

Student Scholarships and Awards: Each discipline will have responsibility for their majors.

Course Syllabi: All faculty will submit course syllabi (identical to that placed on UTCLearn) to the department Administrative staff person.

Office Supplies: Office supply cabinet will be maintained in Grote 318 or 329 and requests for supplies submitted to Administrative staff person.

Teaching and Research Equipment and Supplies: Faculty submit requests to Chemistry Faculty Associate for Chemistry items and Physics Senior Teaching Laboratory Specialist for Physics items (understood to include Astronomy and General Science courses items as well). They will be able to place orders and will coordinate information needed by Administrative Staff person (Nancy Tolar).

Travel Requests: Faculty submit requests forms to Administrative Staff person.

Faculty Committee Assignments: Every summer, the Department Head will distribute a form to faculty to determine faculty preferences for departmental committee assignments for the academic year. The Department Head will consider faculty preferences when assigning faculty to committees. Committees could include personnel representing both disciplines as appropriate.

Timeline: Items with star (*) have been completed.

CHEM Head Meeting with PGA Head & Faculty *	16-Apr
CHEM Head Meeting with Provost and Dean *	24-Apr
CHEM Head Meeting with PGA Admin Nancy Tolar and Kelly Locke *	27-Apr
CHEM Head Meeting with Physics Faculty and Staff *	29-Apr
CHEM Head Meeting with Physics Faculty and Staff *	29-Apr
CHEM Head Meeting with Jack Pitkin Physics Staff and tour labs *	30-Apr
CHEM Head Meeting with Tatiana Allen Physics (multiple) *	2-May
CHEM Head Meeting with Chemistry Faculty and Staff *	4-May
CHEM Head Meeting with Dean Elwell *	20-May
CHEM Head discussions with Nancy Tolar and Jim Narramore (multiple) *	May
Draft Plan to CHEM and PHYS Faculty/Staff for Input *	27-May
Plan to Dean and then to Provost *	1-Jun
and Head submits revised plan with required revisions to Provost*	31-Aug
Mailboxes created for PHYS Personnel in Grote 318D Mailroom *	June
Notify UTC Mailroom of new PHYS delivery location beginning July 1 *	15-Jun
Head Meeting with all Dept Faculty and Staff for planning meeting and conversation with Provost *	13-Aug
PHYS Mail delivered to Grote 318 *	1-Jul
PHYS budget transferred (PHYS charging account for copy codes updated) *	1-Jul
PHYS charging account for copy codes updated to be effective July 1 *	1-Jul
PHYS budget and purchasing matters transfers to CHEM Head and Administrative Staff with necessary changes in IRIS software access *	1-Jul
PHYS personnel files and department records transferred *	1-Jul
Websites updated as needed	30-Sep
Linked Bylaws including RTR criteria and procedures to Dean & Provost	Jan
Summer course responsibility completed by current PGA head *	July
Budget responsibility assumed by CHEM Head *	1-Jul
CHEM Head officially becomes Head of DEPT of CHEM and PHYS *	1-Aug