

PHYSICS DISCIPLINE

Source: Frank Trumpy

Frank Trumpy was hired in 1972 as a physics Instructor at the Ankeny Campus by Russ Slicker and Betty Ronat. He took over the position from Betty Ronat who was the first physics instructor on the Ankeny Campus. Betty became Russ Slicker's Assistant Director. When hired, Trumpy was the only physics instructor on the Ankeny Campus. Dwayne Betten was a full-time physics instructor on the Boone Campus. Dwayne left in 1973 and was replaced by Joel Schaff. Joel taught for a year or two and was then followed by Bob Girvan who had a half-time contract. Bob lost his contract in a "reduction in force," and physics instruction at the Boone Campus fell to numerous part-time instructors. Trumpy says, "I kept urging Vice President Jerry Moskus to create a full-time physics position in Boone. Eventually, I succeeded in that effort, and Nancy Woods was hired full-time. That put physics at the Boone Campus back on track."

When Trumpy became the physics instructor on the Ankeny Campus, much of what was then called "general education" was in building 7 on the lower campus. In the spring of 1975, Ankeny Campus physics was relocated to Bldg. #4 (initially called Bldg. # 32) on the upper campus.

The people he remembers being at the college in the early years include Jerry Wisnieski (math), Tom Beck (political science), Bruce Hann (English), Dorothy Franke (biology), Barb Eastwood (biology), Burgess Shriver (chemistry), Dave York (psychology), Rudy Harris (sociology), Mike Delaney (sociology), Dave Palmer (history) and Gary Wilcox (math). Other physics instructors during his tenure were Lisa Ethington on the Ankeny Campus and Nancy Woods on the Boone Campus. Just before Trumpy retired, a full-time physics instructor was hired at the Urban Campus. For a brief period of time, physics at the Carroll Campus was taught by Fee Faradi. Well-qualified part-time physics instructors were hard to come by. PHYL 401 was one course where part-timers were utilized and, mostly, they were retired engineers. The Urban campus did not get a full-time physics instructor until about 2005. There was never any disagreement among the faculty on course content, but they were able to choose the text they wanted to use.

Courses initially in the discipline were Survey of Physical Science, College Physics, Classical Physics, and Survey of Earth Science. Later, Physics for Technicians, Physics for Respiratory Therapy, Energy Today, and Survey of Physics were added. It was decided that "related science" courses in vocational programs should be consolidated into a single course taught by physics instructors. "Energy Today" was a popular course during the "energy crisis" in the 1970's. It was agreed that the Survey of Physical Science class was misnamed because it contained only physics topics. Thus the name was changed to Survey of Physics.

Trumpy described changes in teaching methods: "One thing that comes to mind is the emphasis that was put on slide rule use. In the BC (Before Calculators) period in the science areas, it was essential that students master the slide rule. We even offered a course that was dedicated to teaching the use of the

slide rule. That course transferred to ISU for pre-engineering students where it was a requirement for graduation in the College of Engineering.

Moreover, there were no personal computers for faculty members or Internet access. The only media “technology” available in the classroom was an overhead projector and a chalk board. Teachers could request a 16 mm projector for video presentations.

We got the first desktop computers in our offices in the early 1990’s. I believe I had the first connection to the Internet and email on the Ankeny Campus. This would have been in about 1993. Because of our then ongoing collaboration with the Stavropol State Pedagogical Institute, email was the most efficient way to communicate. A second phone line was installed in my office and a modem was installed on my computer. I could dial up a server at Drake University to connect to the Internet.”

Assessment for the purposes of accreditation started in physics between around 2003 or 2004. It consisted of an item analysis of the final examination in PHYL 106, Survey of Physics. Prior to this, as the Group Leader of math and science, Trumpy had initiated summative assessments in some mathematics courses starting in 2001 on the Ankeny Campus. By 2003 these assessments had been expanded district-wide. The same model was applied to some biology and chemistry courses, as well. Information learned from the mathematics assessments contributed to making changes in the curriculum in an attempt to improve student success in mathematics courses.

Trumpy recalls that the mix of traditional (18 to 20 years old) and older students remained about the same over his years of teaching. Once, he had a woman take College Physics after her daughter had taken it. Another big change was the enormous influx of international students in the late seventies and early eighties. Most of them were from Iran, and this created a cultural shock for those students and their DMACC instructors.

Content in the courses changed according to Trumpy. “The two most significant courses in the physics curriculum IMHO are College Physics and Classical Physics. Both of these courses cover what is known as “Newtonian physics.” That is to say, physics as it was understood before the year 1900. So, the vast bulk of the material covered in these courses is essentially the same as it was more than 100 years ago. There is a small section on so-called “Modern Physics” that addresses areas developed after 1900, and more recent discoveries can be introduced there. However, it is important to understand that Newtonian physics is the basis for nearly all present day engineering disciplines and applications.”

During his 38 years at DMACC, Trumpy held the following positions: Physics Instructor – Ankeny Campus, Group Leader for Math, Science and Engineering – Ankeny Campus, District Chair for Math, Science and Engineering, Chair of the Curriculum Commission (1982 – 2005), part-time consultant on assessment (2005 – 2010). He retired in 2010.

Trumpy added, “Another position I briefly (about two hours) held at DMACC was as a Vice President. Having traveled to China on a grant from Pioneer Hybrid, I was asked to give a tour to a visiting vice-director of education for the federal district of Beijing, China. Will Zhang , an English instructor who was fluent in the Chinese language, also assisted with the tour and served as the interpreter. It is a cultural

fact that the Chinese are very sensitive about being attended to by hosts of equal or higher rank. It would be considered insulting to be hosted by someone of lesser rank than the guest. Obviously, whoever asked me, a lowly faculty member, to do the tour was ignorant of this fact – or didn't care.

Shortly after the tour began, the visitor pulled Will aside and started asking him questions in Chinese. When I got the chance, I asked Will what the guy wanted to know. Will said he wanted to know who I was. So, I asked Will, "Well, who did you say I am?" Will, who was very keen on these cultural/diplomatic fine points replied, "I told him you are the Vice President for International Affairs." Of course the office and the title vanished at the end of the tour. However, thanks to Will, a potentially awkward situation had been avoided."

Another humorous event/prank that Trumpy recalls was when a group of DMACC employees went to a meeting in Florida. Among the attendees were two colleagues who will be known only as Dorothy and Don. When they returned, the two of them created a phony expense report that included a two-night "honeymoon cruise," numerous magnums of champagne along with steak and lobster dinners; all of which amounted to several thousands of dollars. This was submitted to Jack Asby, the finance officer, to see what would happen. Asby returned the expense report to Don's departmental dean with the comment that he thought Don was beyond rehabilitation, but he wanted Dorothy to report to his office immediately for counseling."

As of November 2019, Physics faculty includes Nancy Woods, Kevin Mouges, and Khaled Bondjarane. Courses being offered are Astronomy, Meteorology, Survey of Physics, General Physics I and II, Classical Physics I and II, and Technical Physics.