JOBS WANTED

CIS grads swamped; salaries make jump

Editor's Note: These articles are part of a series on the job-market outlook for University graduates.

By GABRIEL BOEHMER
Of the Emerald

There's good news for Computer and Information Science students — graduates are finding jobs months before they get their diploma, says CIS department head Steve Hedetniemi.

And that's not all the good news.

The Chronicle of Higher Education reports that the demand for computer scientists is 40 percent greater than the supply and that job recruiters are luring graduates with salaries that have increased almost 40 percent in the last three years.

And while the demand for professional workers in the computer field is expected to increase more than 25 percent this year, the employment of computer specialists could more than double by 1990, according to Chronicle statistics.

But as higher education tightens its purse strings, the University CIS department can't find needed funding to expand computer science programs or to compete with salaries industries offer faculty.

Enrollment in University computer sciences courses jumped 34 percent last year, forcing the department to restrict enrollment.

Regardless, University CIS majors are "setting up jobs months before they leave here," Hedetniemi says.

The average monthly salary now offered to graduates with four-year degrees in computer science increased from $915 in 1974 to $1,558 in 1980 — a 70-percent increase, according to the College Placement Council.

And Hedetniemi estimates graduates with master's degrees are offered average monthly salaries of $1,833 — or $22,000 a year.

However, higher salaries don't just draw students to computer science programs. They also lure professors to industry.

And as salaries increase, so do the number of computer science graduates — although not fast enough to match the growth of the industry.

The percentage of computer science degrees compared to total degrees awarded nationally rose from .2 in 1970 to .8 in 1980. That figure is projected to reach 1.0 by 1984, according to the National Center for Educational Statistics.

But the statistics also indicate the computer science field will be a male-dominated industry, at least in the short run. Of the 7,201 computer science degrees awarded in 1977-78, only 1,852 went to women and 5,349 went to men.

Out-of-class training aides CSPA job hunt

By ANN PORTAL
Of the Emerald

The political science department and the school of community service and public affairs both offer general knowledge and theory that should help students find jobs.

But students are more likely to find a job as a direct result of their CSPA experience, says CSPA coordinator Carol Johansen.

Each CSPA student is required to complete one or two full-time field placements as a part of the program. The placements provide students with documented work experience, which is what public agency employers are looking for, Johansen says.

"The reality of the job market is that employers don't care what your school and grades were. They want to know what you can really do.

"Getting experience and going to school is not easy to do."

Agencies that employ CSPA students as interns must provide a letter of reference and an evaluation of the student at the end of the term. These are powerful bargaining tools in the job market, Johansen says.

Most CSPA four-year graduates start at the mid-management level.

"You're not going to start at the bottom," Johansen says.

In addition to internships at local community schools, law enforcement agencies, public health agencies and agencies that aid the handicapped, CSPA also provides interns for each legislative session. The two-term internships give the students a "big edge in politics," Johansen says.

"The legislators treat their interns as staff."

But even with field experience, graduates have to be aggressive to find jobs, Johansen says.

Johansen says she suspects most graduates leave Oregon, because of the "real job crunch" here. But public service jobs are available in Portland and Southern Oregon, she says.

In contrast to CSPA's placement-oriented program, the political science department doesn't provide job training that leads to specific jobs, says department head Lawrence Pierce.

"We don't see our task as preparing our people for jobs," Pierce explains.

The department is more concerned with providing the knowledge, background and research methods to prepare students for a variety of careers in areas such as politics, journalism, business, economics and law, he says. Thirty percent of the school's majors are pre-law, he adds.

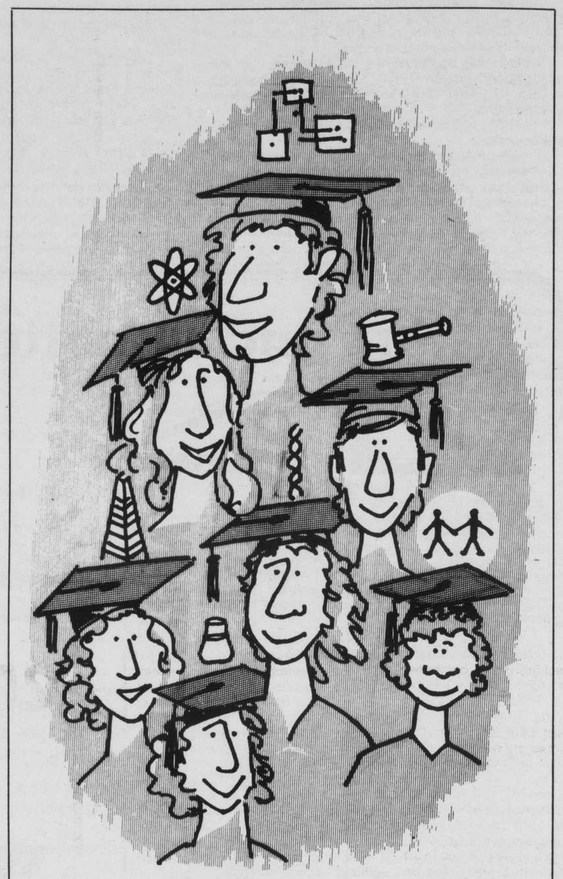
Political science enrollment increased about 17 percent over each of the past two years, Pierce says.

Concerns about nuclear energy and the environment also have stimulated enrollment in those areas, Pierce adds.

Pierce estimates that 70 percent of the department's undergraduates find jobs in the private sector, where salaries are generally better.

But many political science majors have no intention of using their degree to find a specific job, Pierce says.

"Most students just find it interesting."



Graphic by Sioux Anderson

Employer's reaction: a plus for physicists

By MARIAN GREEN
Of the Emerald

Although the University's physics and biology departments share many similarities, they differ in one respect — physics graduates are more likely to find a job.

Physics graduates with four-year degrees are "pretty much" finding jobs, says David Sokoloff, physics department associate head.

But the available jobs aren't necessarily glamorous, Sokoloff warns.

Usually the jobs are technical, such as conducting research on someone else's project, he says.

"They're not doing their own research in a lab."

The salaries vary, and Sokoloff guesses the salary range is $15,000 -18,000.

Sokoloff stresses that physics graduates who become skilled in physics-related areas, such as electronics or computer science, will find increased job opportunities.

And the physics department offers an electronics course for its majors, Sokoloff says.

"People who take that course have the kind of skills those people are looking for."

For example, one physics student had a good background in computer science and took the physics department's electronics course. When he graduated, he found a job with Hewlett Packard company, Sokoloff says. His starting salary was $26,000.

"If you have the right skills, you can step right into them," Sokoloff says of the physics job market.

Sokoloff says the market has "had its ups and downs," but the Reagan administration may provide more jobs.

"If the defense budget goes up, a lot of tangentially related areas will be getting more money."

In turn, related areas such as health and nuclear waste management, will need more physics employees, he says.

Of six recent graduates who responded to a department questionaire, one found a job with a vision research lab, another with Tektronix company, another with Hewlett Packard, two with observatories, and one with a solar energy research organization.

But biology graduates will find a tougher job market, says Gordon Murphy, biology academic administrative assistant.

"There's not somebody waiting to give them a job," Murphy says.

Graduates usually find jobs when there are employment turnovers or deaths, Murphy says.

Although jobs aren't readily available, biologists' skills are needed in a variety of disciplines, Murphy says.

As health services organizations grow, biology majors have found more jobs opening up in nursing, medicine and research, he says.

Graduates can also find jobs in federal, state and local governments.

Federal governments provide biology-related jobs in agencies such as the departments of Interior and Defense, he says. State governments also hire biologists in similar agencies such as the state department of fish and wildlife and the department of environmental quality.

In local governments, graduates may find jobs in health agencies, parks and recreation departments or zoos, Murphy adds.

Also, private industry provides jobs in forest products, pharmaceutical and pest control laboratories, he says.

However, teaching and research is "probably one of the biggest employers" of biology students at least in public elementary and high schools, he says.

Teaching jobs in universities and community colleges are still "tight," he says.

Finally, non-profit organizations such as the Wilderness Society and the Sierra Club also hire biology graduates.

Energy crisis generates geology careers

By MARIAN GREEN
Of the Emerald

All the signs indicate that University geology and chemistry department graduates are finding jobs with ease.

For geologists, that's because of the recent attention given to environment and energy concerns, says Geology Prof. William Holser.

"Geologists are in the forefront of looking for oil, natural gas and uranium," Holser says.

And because there's no end in sight for the current energy crisis, "not only the present market but also the potential market is going to get a lot better before it gets worse," he says.

Local governments also are paying more attention to environmental concerns, and they often hire "at least one geologist," Holser says.

One reason for the steady job market is that the oil companies have so much money, says geology doctorate student Cheryl Wilgus.

"Students seem to find jobs."

While most available jobs are in the western half of the United States, Wilgus warns that jobs in Oregon are scarce.

"Students who love Oregon and want to stay will have the most problems."

Wilgus, who recently accepted a job as Gulf Oil's senior geologist, says Denver and Houston are two of the best areas for landing geology jobs.

Houston's job prospects are good because of its oil industry, and Denver's job opportunities are good because of its oil, gas and uranium resources, Wilgus says.

But "it's a toss-up" as to which industry, oil or mineral, hires more geologists, Wilgus says.

But it's not a toss-up when comparing industrial jobs to federal government jobs such as those with the U.S. Geological Survey.

Those jobs are "almost impossible to get," Wilgus says.

Most four-year graduates find jobs with oil, gas or mineral industries, says. Many graduates return to universities to get advanced degrees.

Salaries for four-year graduates start at about $18,000 per year. Masters graduate's salaries begin at about $26,000 per year, and doctorate graduates salaries pay about $30-35,000 per year, Wilgus says.

Wilgus says she expects the jobs and high salaries to remain.

"There were times when geologists couldn't beg a job," she says. "But I don't forsee that now because I don't think the energy crisis will be resolved soon."

The job market also is good for chemistry graduates, says chemistry department head Robert Mazo.

A Chemical and Engineering News article backs Mazo's claim with a positive prediction for 1981-82 chemists' jobs.

"Chemists are in good demand, should have few problems getting jobs in 1981," says the article's headline.

The unemployment rate for chemists decreased from 1.1 percent in 1979 to .9 percent in 1980, the article says.

Job offers to four-year degree holders in chemistry increased 13 percent from 1978-79 to 1979-80, according to the University of California at Berkeley's career for planning and placement.

For female chemists the job outlook is even better, according to the center.

Its figures show job offers to women jumped 26 percent from 1978-79 to 1979-80. Job offers to men increased 6 percent over the same period.

Graduates usually find jobs in the chemical industries such as the plastic, pharmaceutical and metal industries, Mazo says. Jobs also are available in government laboratories, he notes.

"Salaries have been going up but not quite as fast as inflation," Mazo says.

A "safe guess" for a four-year graduate's starting salary is $16,000, he says.

While "a number of our students" found jobs with Portland companies and with Bend Research in Bend, in the Eugene-Springfield area the chemical industry is very small.

Chemical industry is "scattered all over," Mazo says, but the most thriving job market is "probably California."

"Silicon Valley," located near San Jose, and the San Francisco Bay Area provide jobs because of prospering petroleum — and other industries located there, Mazo says.

"The bottom line is that for people who want to stop their education to get a job whether temporarily or otherwise, the outlook is very good at this time."