President McBride will step down next June after 14 years as head of CSM, the longest tenure for a president of a Colorado College.

Dr. McBride and his wife moved to Colorado in September of 1970. Before this time Guy T. McBride was an associate professor of Chemical Engineering and Dean of students at Rice University in Texas. He joined Texas Gulf in 1958. He was named manager of the research department the following year, was elected vice president in 1960 and appointed general manager of the phosphate division of 1963.

An engineering student of the University of Texas, he holds a doctor of science degree from MIT and is a registered professional engineer in Texas, Louisiana, and New York. Our President has accomplished many things for our school including: three major new buildings, established a major development effort which has secured over $38 million in six years, and installed 25 named professorships and lectureships.

Mrs. McBride met Guy in the late 1930's at the University of Texas. In 1942 on September 2, they were married. They have three children, Ellen, Bill, and Rebekah who are leading successful lives in different parts of the U.S.A.

Dr. McBride's hobbies are furniture crafting and hunting. His handmade furniture collection consists of a large dining table, a serving cart, and a dresser to name only a few items. He is a serious hunter and has several white tail deer, mule deer and elk mounted in his home. He has also competed on a championship level in target shooting. The McBrides plans after his retirement are to reside in Lakewood, CO. and further his hobbies. They plan to continue to help raise funds for the school for one year. According to Mrs. McBride they will try to see more of their grandchildren also.

The Prospector would like to wish the McBrides the best of luck and happiness. We are very grateful for the things that Guy T. has brought to this campus. We hope the tradition of leadership will be carried on at this outstanding institution.

Goodluck and Best Wishes. The Prospector Staff
Guy and Becky attending a dance at University of Texas in 1939.

“Happy Birthday” Dr. McBride.
Enjoying “life” at Mines.
Happy birthday, Golden! You are 125 years old this year and steeped in history. For many centuries, Golden was the site of camp grounds for Ute Indians, but in 1858 a few scattered tents were erected here by whites.

Golden was founded in June, 1859, by George West who headed the Boston Company. These men organized the town and laid out Golden City, reputedly named for Tom Golden who gave up the search for gold to become a merchant.

In 1860, Golden City boasted 700 residents and became the county seat of Jefferson County, Colorado Territory. From 1862 until 1867, Golden was the Territorial Capital.

The Colorado School of Mines was founded in Golden in 1874. The frontier mining camps were giving way to communities providing jobs in smelting, milling, and refining. Classes are held snow or shine or president’s day for the 3000 students currently enrolled at Mines.

The “M” on Mt. Zion might be the first thing new students notice when they first come to Golden, but the second thing is “that smell.” Soon, however, all Mines students learn that the smell is of gold — pure liquid gold. The Adolph Coors Company is Golden’s largest industry, attracting 400,000 visitors each year.

About 15,000 people live in the picturesque valley of Golden. Golden is surrounded by Lookout Mt and the foothills on the west and by South and North Table Mountains on the north and east. The climate is superb; sunshine is abundant. However, there is a mighty wind at times which

"Golden is a quiet and peaceful town - the street lights start flashing before dark!"

Eric Lewis. Games room att.

serves the purpose of keeping the brown cloud from creeping up from Denver located only twelve miles to the west.

Yes, Golden is an ideal city. The metropolis of Denver is only 25 minutes and an RTD bus away. Yet Golden holds on to its small town aura. Also, no one can deny the beauty of the area. It seems you can almost touch the snow on the mountains surrounding this city of Golden - “Where the West Remains.”
“Students at or from Mines are extremely proud, to the point of arrogance, of being associated with the institution and its traditions.”

Claudia Fonio, ’84

Proud be ye the learned of this institution for yours is a heritage worthy of few. It may not be simple, this task you o’rtake, but then nothing is worthwhile unless difficult to attain.

Life is a challenge to which you rise. Reach out and take the most precious prize. To learn is to live, but stagnation be damned. So this is your quest. To Mines you have come to reap of tradition second to none.
“Mines is an emotional rollercoaster. I think we get so caught up in being Mines students that we forget to enjoy life as it passes by.”

Todd Nash, '84
There will come a day when you will remember only the good times with friends gone by. So it is with senility in mind that this has been written in hopes that you will never forget what it was really like when you were a student at Mines.

Here's to the Freshmen, those perpetually lost, and the laughs they so unintentionally gave to the upperclassmen. Remember moving away from home, you were off to college you said, but after a week of cafeteria food, you all wished you were dead. How about your first exam, a milestone indeed, then alas your first "F", or dear me, were they one and the same? The homesickness, the loneliness, the stress, the sleepless nights. Then just when you thought you'd seen everything, along came finals week . . . thank goodness for those extended drop dates.

Now for the Sophomores who have discovered the wonders of caffeine, and probably not a minute too soon. You work and you work and you pray for the weekends. But this is the year the calendars have been changed to include three and half month long weeks. Then lest you forget, remember your mechanical friend the Dec-10 with whom you spent so much time (Sorry. Login capacity exceeded, command aborted . . . please try again).

Those Juniors, by golly, have now got the scoop. Stay away from BE, excuse me. EG. And it's fluids lab on Fridays and skiing on Sundays. There are parties and E-Day and Homecoming and such. You never knew Mines had so much to offer.

How about those Seniors? They are last but not least. You've got the time to look and the ability to see the wonderful times of which you are a part. Remember the friends you've made along the way who cared and laughed with you. Glory in the pride and respect you've attained through blood and sweat in the dead of night. You have been challenged and you have risen, proven equal to the task and soon you will have become a graduate at last. So strive and press on and never give in and never forget that which makes this institution as great as it is . . . you the student.

"I think what I hated the most was getting a test back with a whopping score of 39 and finding out that the class average was 79 . . . nothing like biting the big one."

Julie Berg, '84
Taking a little time off for fun and smiles...
Sometimes we play too hard.
SEOUL, SOUTH KOREA - Carrying placards, some 5000 Korean Christians gathered Seoul's Youngnak Church on September 6, 1983 for an anti-Soviet rally to protest the shooting down of the Korean Air Lines Jetliner with 269 people killed. Picture courtesy of Wide World Photos.
Welcome To Mines Class of 1987

Once again, come the end of August, Mines was infiltrated by those most resilient of species, the incoming Freshmen. This year the Class of 1987 numbered approximately 560, bringing total enrollment up to 3000 in this Mines' 110th year.

Of the 560, 400 to 410 are high school graduates, the other 150 being transfers. According to Admissions Director Bill Young, the incoming class “is a good-quality class, including the highest percentage of minority students in history.” He speculates that eight to ten percent of the new students are minorities. As for women, they have been maintaining their typical numbers of recent years, about 22 to 23 percent of the incoming class, he adds.

It is then with the intent to indoctrinate these individuals with all pertinent Miner details that NSO (new student orientation) has become an annual assembly. This year through the efforts of Bill Hill, the NSO Director, and Blue Key volunteers the orientation went smoothly. Year after year certain activities have stood the test of time to become traditions of NSO. Among them are, the class hard hats, the Mines Peak climb, fraternity parties, the traditions assembly, Senior court, and last but not least the trek up Mt. Zion to whitewash the M.

Congratulations to those of you who made it into Mines and good luck in your future here.

P.S. Never forget how carefree you were in that first week spent at Mines.

One of the oldest traditions of NSO is the trek up Mt. Zion to the M - and who said traditions can't be fun?
Homecoming 1983 was entitled, “CSM - The Best Little Orehouse in Colorado.” True to the spirit of Mines’ Homecomings of the past, this year proved that Miners really can have fun if they are given half a chance.

It all began on Thursday, October 20. The Annual Powder Puff Football was held on the IM field. As usual, it was a rousing success, with the spectators having as much (if not more) fun than the players.

Next came Friday, the introduction of the Queen and Beast candidates. The Beasts were somewhat disappointing this year, as fewer and fewer seem to fit the mold of the “beastly” sort of people. Guess you guys are just too good looking. The Queens were ravishing as usual. A surprise entry of the team comprised of “Pauline” Boucher and “Butch” Noonan did add something to the proceedings though.

The Noise Parade and Events were, as usual, Miners at their finest. The buring of the Ft. Lewis effigy (which some will tell you is just outside of Colorado Springs) went well, with Miners fortified by beer and enthusiasm.

The events seemed to be well attended, and their attraction for Miners already filled to bursting with joy (among other things). The contests were amusing, entertaining, and just plain fun to the participants and spectators alike. Many thanks to all those who attended, with a special thanks to the men and women that organized and ran the contests. Good job, people!

Then came Saturday, the things really got into the swing of things. First, the Homecoming Parade, starring the floats created and executed by the fraternities, including the award winning Beta float that really stole the show. The Miners watched and oohs and aahs filled the air. Beer flowed freely as well, preparing the crowd for the football game at 1:00 p.m.

Ah yes, the football game. Though the Mighty Miners lost the game to Ft. Lewis (14-13), the game was filled with exciting moments to remember. Even in defeat, the Miners took it all in stride, cheering on their team through thick and thin.

The above copy was reprinted from the OREGON DIGGER, Oct. 26, 1983.
During halftime, the Queen and Beast winners, Sandra Abel and Grant Burchell, were announced. Also held was the annual Burro Race between the frats. The burro race was something of a rout, with most of the crowd wondering whether the two burros would finish at all.

After the game, the alumni of years and years past were invited to dinner at their old frat houses, while the rest of the school was gearing up for the Homecoming Dance.

The Dance, which starred the band, Lighthouse Rhythm, was well attended. The Miners were out of their jeans and t-shirts, and into tuxedos and dresses for the occasion, showing just how far a Mines student will go to have a good time.

Finally, it was time to pack it all in. The crowds had gone home, the beer had stopped flowing. Homecoming 1983 was just another memory for the many Miners this year. We may have put it out of our heads for the present, but never out of hearts.
"Homecoming really is a special time to come back to and it's good to see that students still have spirit for the occasion . . .

. . . but I think we could drink more beer back when I was a student!"

an alumni

Homecoming Committee

Erika Balke waves as she passes by in the Beta float.
When December 16th rolled around it was once again time for the CSM Annual December Convocation. Many an eye needed to be dried as 185 undergraduates and 73 graduates were given the blessing from Mother alma mater and sent on their way out into the reality of the working world. In addition to honoring the graduates, it has been the practice since 1980 of the Board of Trustees to acknowledge outstanding members of the community with the Mines Medal. This year the Mines Medal was given to two educators, Clark B. Carpenter (Posthumous) and Robert J. Weimer; a banker, Bruce M. Rockwell; and a political figure, Senator Fred A. Anderson.

Congratulations to both those of you who graduated and those of you who were the recipients of the Mines Medal.
Take time for work —
  it is the price of success.
Take time to think —
  it is the source of power.
Take time to play —
  it is the secret of youth.
Take time to read —
  it is the foundation of wisdom.
Take time to be friendly —
  it is the road to happiness.
Take time to dream —
  it is food for the soul.
Take time to love and be loved —
  it is the privilege of the Gods.
Take time to look around —
  it is too short a day to be selfish.
Take time to laugh —
  it is music to the soul.
Early in February, over 200 Mines students gathered at the Breckenridge Ski Area primed for a little skiing and lot of fun. Why, you ask? Well it was once again time for Blue Key’s annual Winter Carnival, the event solely designed to get the student to take advantage of Colorado’s greatest asset, skiing. So for a mere, relative so, pittance of $14.50 a student was offered a full day of skiing plus a scenic mid-mountain lunch. Who could turn down such a deal? Furthermore, for an additional dollar or two, an individual or group could participate in one of the various activities that had been planned. Among the various events were a cross country race, slalom race, trail map activity, and obstacle course. To add incentive to those participating, prizes were awarded to the top three of each event. All in all spirits were high, as well as consumed, and once again Winter Carnival proved why it is one of the students favorite events.

CROSS-COUNTRY RACING
1. Karl Eggers (The Club)
2. Tim Marsh (Pathfinders)
3. Kirk Primavera (The Club)

TRAIL MAP RACE
1. Frey/Wilson (Stray Dogs)
2. Giczewski/Faras (Sigma Kappa)
3. Egle/Gilcrese (Pathfinders)

OBSTACLE COURSE
1. Sverre Ditley-Simonsen (SPE)
2. Doug Mackenzie (Beta Theta Pi)
3. Craig Lis (Independent)

MISCELLANEOUS OBSTACLE COURSE WINNERS
Fastest Woman - Sue Giczewski
Best Style - Darrel Kramer
Best Wipe Out - Cindy Egle
Clumiest - Bill Yearous

SLALOM RACING
1. Kevin Schaffer (Independent)
2. Steve Rich (Independent)
3. Marcus Robinson (Beta Theta Pi)
Theta Tau once again provided plenty of entertainment for the 5th annual Big Event. This year’s attractions included a rock ‘n’ roll band, country band, solo artist, five comedians, and most importantly 50 kegs of beer. In addition, the Prospector staff sponsored “Shoot Yourself”, an opportunity for everyone to expose their more hidden character. Although the admission fee was increased from last year approximately 800 people showed up to dance, drink, and have a great time.
"I'm really glad that Student Council didn't cut the Big Event because it's a party for the students, by the students."

Brad Neptune, '84
The second annual "Shoot Yourself" was held at the 1984 Big Event. The pictures even turned out this year! The Shoot Yourself night is done to give everyone a chance to get their beautiful faces, or whatever, in the yearbook. For only 25¢ anyone could use any of the props, in any position they chose, and take a picture. It's incredible what engineers can come up with!
The evening of February 22 was a special one at Mines. This was the night that the Denver Symphony Orchestra paid the Mines campus a visit. The event was sponsored by AMAX and the Associated Students of Mines.

You might expect an occasion like this to be sedate and composed, but it was with a touch of humor.

Among those selections played were movie themes from “Fantasea”, “Ordinary People”, and “Bridge Over the River Kwai.” In addition to movie themes several light classics and selections by Schubert and Strauss were performed. One of the lighter moments occurred when the Symphony elected to play our own school song “The Mining Engineer.”

Granted, many came to hear magnificent music, but this night had a dual purpose, the other being to honor the retirement of our own president, Guy T. McBride.
The Denver Symphony, under the direction of James Setapen, plays "The Mining Engineer" in honor of Dr. McBride.
Above: Denver Symphony Orchestra conductor James Setapen leads his musicians in the performance honoring President McBride.
The Society of Women Engineers had an exciting opportunity this past year. On February 10-11, the CSM chapter hosted the Annual Region V Conference on our own Mines campus. It was the first time that a Colorado school has hosted the conference and the CSM section considered it an honor for Mines to be selected as the conference sit.

The conference offered much to the more than one hundred women who attended. Focusing on the conference theme, “Engineering Directions - Today and Tomorrow”, seminars were given dealing with such topics as “Women in Management”, “Managing Your Career and Your Life”, and “Women in Higher Education.” However, the conference was not all work and no play, as other activities included luncheons, fashion shows, ski trips, ice skating, and tours.

Overall the conference was a big success and the CSM section had a lot of fun while learning about project organization, meeting and hostessing new people, and essentially putting in a lot of hard work towards a worthwhile activity.
SWE President, Brenda Crumb, receives a $1000 contribution for the convention from IBM.

SWE members enjoy a banquet on Friday night.

Above Right: The group heads off to Breckenridge for a day of skiing.

Right: Prof. Annette Bunge keeps the discussion lively at the panel for “Women in Higher Education.”
MINES LITTLE THEATRE PRESENTS:

Come fall, those more aesthetically inclined were at it again. Dawning costumes and new personalities, fellow actors and actresses of MLT infused a little culture into our college lives. The fall season brought such performances as “Cactus Flower” and “The Best Man”. “Cactus Flower” as a comedy about the antics of a dentist and his attempts to persuade a girl to marry him. This play starring Randy Mackie and Tanya Thomas with its witty one-liners was entertaining and well worth the $1.50 admission. “The Best Man”, the second of the fall plays, dealt with the clash of values between two candidates for the presidency of the United States. The main characters, played by Dennis Fisher and Brent Truskowski, portrayed their characters very well. The play as a whole showed a high level of acting ability that lent credibility and made for an enjoyable evening. Here’s to the cast of both “Cactus Flower” and “The Best Man” on a job well done!
The musical “Guys and Dolls” was a spectacular production whose success can only be attributed to the talented performers. Mrs. Linda Daniel directed the MLT spring semester musical, and numerous actors, actresses, musicians, and technical crew members helped to make “Guys and Dolls” a fun experience for everyone in the audience.

The infamous “Hot Box” dancers strut their stuff in “Guys and Dolls.”

Sky Masterson, played by Steve Gallington, rolls the dice with his buddies.
In the spring semester MLT maintained its tradition of fine performances. "Nightwatch", a classic murder mystery, written by Lucille Flectcher and directed by Melinda Gulden was the first of two plays presented. The cast members did a good job of keeping the suspense high and the audience on the edge of their seats.
E-day 1984 was indeed a “goldmine of excellence” as the theme depicted. This year was special in that it coincided with the 50th anniversary of Engineer’s Day. So this year a little extra effort was put into E-day in anticipation of a celebration worthy of such an occasion. And the results? Well, we’ll let you be the judge of that. Happy Anniversary to you Engineer’s Day.

E-day got off with a bang when the students were given what was said to be the best fireworks display seen in Mines history.

Governor Lamm stands on the steps of the Capitol as he proclaims April 6, 1984 - Engineer’s Day.
Evolution vs. Creationism

This year's E-Day lecture focused on the topic of origins. A panel composed of faculty members Andy Rindsberg, Graduate student in Geology; Dr. John W. Geisman, Assistant Professor of Geology, and Dr. David M. Updegraff, Professor of Chemistry and Geochemistry, supported the theory of evolution, while Dr. Duane T. Gish spoke for the theory of special creation. Although, not intended to be a debate there were moments of confrontations that added spice to the event. All in all it seemed to be worth the time spent by the almost 200 spectators.

Tom Strong was a competitor in several of the events.
Seniors compete for the best and the worst in facial hair.

Warren Gaal concentrates intensely while competing in the spiking contest.
“It was one of the best E-Days ever! But, there are still beer huggers for sale.”

Dave Bagley, E-Day Chairman

Senior Roland Hea leads the ore cart up to the foot of the state capitol building.

A true miner shows us how it's done in the jack-leg drilling contest.

Two cold and crazy students push their way down Clear Creek in the raft race. Brrr . . . .
The 1983 E-Day Show featured comedian Steve Landesberg and regionally renowned musician, Jon Ims. Opening the show, Jon Ims once again proved why he’s become one of the region’s most popular acts. Landesberg, in exhibiting his unique brand of stand-up comedy was also entertaining. In short, it was a fitting ending to an enjoyable weekend.

1984 Engineer’s Day Committee:
The pages in this section of the yearbook fall under the title of "events", but unfortunately not every day at Mines is an event (not even every other day). Usually the days are not filled with excitement, but rather the doldrum of going to classes and studying. Sometimes you can't even spare time to watch your favorite TV show. So that we don't forget what Mines is really like (I doubt if you will though) these pages are devoted to the more realistic side of Mines life - the uneventful side.

Senior Susan Gudath listens intently to one of the many lectures that are all in a day's work.

Debbie Dinsmore works on her homework.
Homework can be frustrating and it isn’t unusual for a student to reach a stalemate.

A coed engages in a little calculator punching.

This student takes time out to explain a concept.
On the other hand we don’t happen to work all day so here’s to the ordinary events we are a part of each day.

Pinball anyone?

Denise Dobkins and Christine Claypool take time out for the yummy cafeteria food.
This student gets into Halloween.

The pool tables in the games room are almost always in use.

Three coeds get some fresh air on the Twin Towers balcony.

Two male students seek a release from the stresses of homework.
On many a Friday afternoon you could find the "I-Club regulars" sitting around drinking beer and enjoying the FAC entertainment. This year comedians, singers, and musicians performed in front of students. All in all the FAC's meant reduced beer prices and a whole lot of fun. FAC's are sponsored by the Student Center Activities Council.
Many people enjoyed the singing contest between the Betas and the Kappa Sigs.

"The Betas sang pretty good, but the Kappa Sigs had more spirit."

John Guffey, Kappa Sig
Attention Miners: We are being watched by unusual and unfamiliar beings - the media. Over the past few years people in the media have interviewed students and faculty, written articles, and filmed commercials on the Mines campus. Mines has been featured several times in the Rocky Mountain News and the Denver Post and even appeared in Newsweek once.

Don't look now, but at this very moment a camera might be focused on you... Roll 'em!

"It's fun to call my Mom and tell her to watch the Today Show because the place where I work is going to be featured."

Bill Hill, Activities Director

Channel six was on campus making a film on women at Mines. The film is in the library for anyone at view. Here Erin O'Brien, '83, is being interviewed.
This television comercial crew drew a lot of spectators. They were here to film clips for a Coors comercial. Unfortu-
nately, none of the film clips from the school were used in the final product.

NCAA Productions came to campus to do a feature on Mines which was shown on national TV during college foot-
ball games. Just think we're famous!
Commencement for the Class of 1984 was held on Saturday, May 5, at 9:00 A.M. The 277 graduates comprised the largest class ever to proceed down the aisles of Bunker Auditorium. From the computerized Green Center organ, came the strains of “Pomp and Circumstance.” The ceremony was very solemn and formal, however, many graduates longed to be popping corks on champagne bottles, tossing their mortar boards, and cheering loudly.

The commencement speaker, Ian MacGregor addressed the graduates on the similarity of the 1980’s to pre-World War II times. He was granted the honorary degree, Doctor of Engineering.

Several Mines alumni selected each year by the Board of Trustees were recipients of the Distinguished Achievement Medal. Established in 1942, the silver medal is awarded to alumni of CSM who have distinguished themselves in the field of mineral engineering. Those receiving the award were: Arden Bement, Jr., Robert Hamilton, Allan Provost, Robert Searls, and Robert Waterman, Jr.

Eighteen members of the Class of 1934 were present. They celebrated their Golden Anniversary all weekend and were individually introduced during the commencement.

Dr. Guy T. McBride was honored by the Board of Trustees. President Fred Schwartzberg hooded McBride and conferred upon him Doctor of Engineering.

Finally, the Class of 1984 bolted out the doors of the Mines institution literally hitting the ground running.
"You have the distinction of being the largest class to graduate from Mines and there won't be a class this size in a long time."

Dean Mike Nyikos

Leanne Baker, of Boulder, Colorado receives her Doctor of Philosophy in Mineral Economics.

President of the Board of Trustees, Fred Schwartzberg, accepts the Class of 1984.
The commencement speaker, Ian MacGregor, was conferred an honorary degree, Doctor of Engineering, from the Colorado School of Mines. MacGregor was born in Kinlochleven, Argyllshire, on September 21, 1912. He is now a naturalized American citizen.

MacGregor was appointed chairman of the British National Coal Board in September 1, 1983. He was formerly chairman and chief executive of the British Steel Corporation and is now a part-time board member.

MacGregor joined Climax Molybdenum Co. in 1957 as a vice president and took control of corporate diversification after the merger with American Metal Co. (AMAX). He was elected chief executive officer in 1966. Under his direction, AMAX expanded its interests in both the United States and Australia.
The 100th Commencement ceremony at the Colorado School of Mines inaugurates use of the University Mace, carried by Lt. Colonel Richard Anderschat. The symbol of academic authority, the mace stands four feet, eight inches tall and weighs sixteen pounds. The core is a rosewood staff, covered by fitted brass, silver plated, and topped by Blaster, the rendering of the School's mascot by Manuel Martinez. Professor Robert Taylor executed the design and Emil Dangreau produced the finished standard with the seal photoengraved on the base of the staff.

As a symbol of academic authority, the mace comes out of a rich history. David A. Lockmiller in his definitive "Scholars on Parade" recounts: The mace, which is now being used by several colleges and universities in the United States, has an ancient history as a symbol of authority. Originally it was a weapon of offense, made of iron and capable of breaking armor. It was a giant club, which came to be associated with brave men who fought to protect the king's person. Maces were borne by sergeants-at-arms to protect Philip II of France and Richard I of England.

The use of maces for civic purposes began about the middle of the thirteenth century. By the sixteenth century or earlier they were covered with silver and used by several cities. In 1649, the House of Commons obtained a mace, and in 1756, a silver mace was made for the colony of South Carolina, which is still used in the state capitol at Columbia. The famous mace of the Lord Mayor of London is made of crystal and gold and set with pearls. As a symbol of authority, the mace usually has arms engraved on or near the top and these or a cross may be protected by a coronet or arched crown. In commencement processions the mace is carried before the President or Chancellor and the dignitaries composing the platform party. The British term beadle, to mean mace bearer, is not generally used in the United States.

The mace is but an additional note of pomp in academic life. Along with historic and colorful costumes, flags, and regalia of office it stands for order and authority in the never-ending pageantry of scholars on parade.
Hail to you the Senior
For this day is your day
It's a time for friends and laughter
A time of fun and play . . .

As the end of the spring semester rolled around it was once again time for that traditional event put on solely for the uppermost classmen ... the Seniors. Although this year's Senior Day dawned windy and cold it failed to dampen any spirits for the theme of the day was to have fun and have fun they did.

Seniors wait for the traditional painting of the "M".

Jared Olsen shows that, as usual, more whitewash gets on the participants than on the "M".

Hungry senior dig in at the Senior Picnic that, this year, featured a taco bar and homemade ice cream.

Ronald Reagan is equally as outspoken on other issues - banning abortion, restoring school prayer, and passing a balanced budget amendment. Since Reagan took office in 1980, his policies have contributed to the worst recession since the 1930's with an unstable recovery; the deficit has exceeded three trillion; and military activity has increased in Central America and the Middle East.

The 73-year-old man, the oldest president to hold office, has remained popular in the polls despite these frustrating developments. He holds an All-American charm and is a natural born politician. No President has been as well liked at the three year mark since Ike.

Reagan is likely to win re-election. While the top Democratic contenders battle for the Democratic nomination, Reagan continues to act presidential.

Washington, D.C., Nov. 14, 1983 - Little Lee Woo, age 4, yawns after the trip from Korea on Air Force One with 7-year-old Ahn Gi Sook as they stand with the President and Mrs. Ronald Reagan. The children were brought to the U.S. by Mrs. Reagan for heart surgery.

Photos in this section courtesy of Wide World Photos.
Atlantic City, N.J., Sept. 17, 1983 - Vanessa Williams, the new Miss America, is shown as she is crowned by the outgoing Miss America, Debra Maffett. This is the first time a black woman has won the title.

1983 - Big Brother is watching you. Modern technology is certainly capable of producing the frightening conditions described in George Orwell's book "1984," but social scientists agree that the repressive conditions are unlikely to exist.

However, other not-so-happy conditions are a reality in 1983. The Korean Flight 007 was downed by a Soviet missile on September 1, 1983. All 269 passengers were killed. The USSR claimed the 747 airliner was a spy plane.

In late October, 1983, Army troopers from the 82nd Airborne Division made a controversial assault on Grenada in an attempt to secure the island. The effort was successful, but 19 Americans died and 144 were wounded.

On April 18, 1983, the U.S. embassy in Beirut was bombed, killing 63. On October 23, a truck loaded with TNT charged into the U.S. Marine Battalion Landing Team compound. The four story building collapsed, crushing 218 Marines, 18 sailors, and 3 soldiers. Reagan ordered the Marines to pullout of Lebanon in February, 1984.

The nation became phobic over acquired immune deficiency syndrome - AIDS. The disease is most prominent among homosexuals, hemophiliacs, and Haitian immigrants. Scientists are hopeful of finding a cure soon.

In February, 1984, Konstantin Chernenko became the new Soviet leader because of the death of Yuri Andropov.

Not all news was bad. The country was overtaken by the Flashdance craze - sweatshirts, legwarmers, and breakdancing. Singer Michael Jackson's album "Thriller" became the fastest selling album in history and had already produced $120 million for its distributor CBS Records. Jackson was paid several million by Pepsi Co. to film commercials. The dazzling show resulted in a near disaster as Jackson's hair caught fire from the fireworks.

The race for the Democratic nomination took a surprise-turn as Colorado Senator Gary Hart soundly defeated frontrunner Walter Mondale in several New England primaries. Rev.

Pacifica, Ca., March 1 - The pounding Pacific Ocean tides are eroding the coastline south of San Francisco.

"I knew it was all over when I saw the hot tub sail by into the ocean."

Malibu resident Becky Ilangen, after Calif. Storm

Jesse Jackson brought attention to his campaign by gaining the release of Navy Lt. Robert Goodman from Syrian President Hafez Assad.
Top: New York, N.Y., May 25, 1983 - The night sky is illuminated by a shower of fireworks in celebration of the Brooklyn Bridge's 100th birthday.

Los Angeles, Calif., March 1, 1983 - Cars parked in alley are half-buried by debris after a tornado tore through a residential area.

Houston, Texas - Astronauts Sally K. Ride and Guion S. Bluford made space history. Ride was the first woman to go up in space on Shuttle Flight Seven, and Bluford was the first black into space on Shuttle Flight Eight.
Beirut, Lebanon - Rescuers prepare to lower a U.S. Marine on a stretcher to safety after being trapped in the wreckage of the U.S. Command Post. Terrorists used a dynamite laden vehicle to blow up the building in which hundreds died in the blast, Oct. 23.

“\nI have been watching these men doing the clearing, and this is when they get most emotional. It’s when they have to pick up the birthday cards and the wedding pictures strewn around the rubble that it hits them that all of these people were individuals.”

Lt. Comdr. Arnold Resnicoff, rabbi of the Sixth Fleet

Narman, Turkey, Oct. 2, 1983 - A mother wails behind the dead bodies of her five children in the village of Kazban Ozer Murathagi, after an earthquake killed over 500.
Newport, R.I., Sept. 26, 1983 - The Australian 12-meter yacht Australia II, (KA6), leads U.S. Liberty in the fifth leg of the 25th America's Cup, enroute to the first ever foreign victory in the 132-year-old event.

The Olympics - 1984. The XIV Winter Games were held in Sarajevo, Yugoslavia. A week long snow storm dampened many events, but when the weather cleared, the sun was pure gold for several American athletes.

Debbie Armstrong won the gold in the women's giant slalom. Identical twins Phil and Steve Mahre swept the men's giant slalom with a sizzling 1-2 finish. Phil was more pleased with another prize. His wife, Holly, gave birth to a son at the same time Phil was swishing his way to a medal.

Bill Johnson, the cocky Californian, lived up to his promises by making Olympic history. Johnson was the first American to win a medal in an alpine event - the downhill and in record time.

Colorado celebrated the homecoming of their Olympic hero, Scott Hamilton. Hamilton won the gold medal in Men's figure skating - a nice addition to his impressive cache of four national and four world championship titles.

Overall, the Russians took home the most gold medals. That fact did not lessen the glory of the Americans. The Russians cast a shadow over the 1984 Summer Games by imposing a boycott. Several Communist block countries followed their lead and decided not to attend the Olympics in Los Angeles. The Russians claimed security would be too lax and Russian athletes would be terrorized and kidnapped. Olympic contenders from all countries were deeply disappointed.

Boston Red Sox' Carl Yastrzemski and Cincinnati Reds Johnny Bench tip their hats to the fans after playing their final games. Both played over twenty years for their respective teams.
Beirut, Lebanon, April 19, 1983 - An American Flag and a U.S. Marine stand by as rescue workers sort through the ruins of the American Embassy in Beirut, after being hit by a terrorist bomb, killing many and wounding over one hundred.

Charleston, S.C., Oct. 26, 1983 - An evacuee of Grenada pauses to kiss the ground after landing at the Charleston Air Force Base. Many medical students from the United States were flown to safety after the U.S. troops invaded the island.

Painesville, Ohio - Mishleen Abi Ghanem Earle weeps on the casket of her husband, Navy medic Bryal L. Earle, after burial services. Earle, killed in the Oct. 23rd bombing of Marine Headquarters in Beirut, married the 17-year-old Lebanese girl just six days before the attack.
SPORTS

BYU quarterback Steve Young becomes the richest football player (for at least a week) as he signs for a paltry 40 million with the L.A. Express of the USFL.

Sugar Ray Leonard comes back to fight...he wins...and then promptly retires again.

Bill Johnson wins the Downhill at the Winter Olympics and became the first American to do so in almost 50 years.

The Nebraska Cornhuskers became the most prolific offensive football team in NCAA history only to lose its last game to the Miami Hurricanes.

Baseball commissioner Bowie Kuhn resigns and is replaced by Peter Ueberroth, the L.A. Olympics organizer.

BUSINESS AND POLITICS

Ma Bell broke up on New Year's Day to become AT&T bringing an end to a monopoly but also creating a lot of headaches for its customers.

Denver gets a new mayor, Federico Pena, its first Hispanic mayor ever, replacing Bill McNichols.

Gary Hart stuns Walter Mondale and creates an unexpected race for the Democratic nomination.

The national debt soars in excess of 1 trillion dollars while the deficit approaches 200 billion.

Major mergers of oil companies occurred.

Socal and Gulf
Texaco and Getty
Mobil and Superior

ENTERTAINMENT

Best Picture: James Brooks' "Terms of Endearment" wins 5 oscars
Best Actress: Shirley MacLaine for her role in "Terms of Endearment" as the film's impossible, but ultimately likeable mother.
Best Actor: Robert Duvall for his role as an alcoholic country singer in "Tender Mercies".

Michael Jackson steals the show by walking away with the most Grammies anyone has ever won - seven.

"The Day After" was shown amid much furor - a movie on the consequences of Nuclear Holocaust.

Pop singer Boy George takes America by storm with such hits as "Do You Really Want to Hurt Me" and "Carma Camelion".

Break dancing becomes the fad in lieu of the movies "Flashdance" and "Foolloose".

MISC.

The Space Shuttle begins satellite repair on its 11th flight.

Girl Scout cookies are tampered with and nationwide over 700 cases are reported of finding foreign objects baked into the cookies.

The first human heart transplant takes place.

The Cattle King meat packing plant is indicted on charges of processing cattle that had already died before being sent to the slaughterhouse.

Colorado comes down hard on drivers driving under the influence with tougher drunk driving laws.
You say you’re a miner? Well, then how about taking a little test? What, you say, that’s all you ever do? Well this one shouldn’t be too hard, why you ought to ace it ... you being a miner and all. So come on what the heck, give it a try.

First let’s set the scenario. You the student study vigorously and diligently (we hope) in an environment, the CSM campus, well suited to such endeavors. You study four (or five ... usually not more than ten) long years to obtain a highly impressive degree (me thinks). So having spent all this time in the classroom and on the campus let’s just see how much you’ve learned about the place where you learn, the campus itself. Identify these photos of things that are associated with or on the campus of the Colorado School of Mines.

#1.

Take a guess at what this one is.

Better yet go and take a look at it in Paul Meyer Hall. This is the great pendulum aka time keeper that those Physics profs show such pride in. It has reportedly worked in the past but who knows now ... only the shadow knows.

#2.

Step lightly and watch where you step! Industrious worms? Well who knows, but come spring courtesy of the grounds crew all the lawns sleekly look like this.

#3.

Can you guess where on campus this tomb lies? And yes it is on the CSM campus.

Look to the background and you will see Rocky Field ... yes these poor victims of a mining accident lie in peace southwest of Brooks Field outside the fence containing Rocky Field.
How about this one? Where on campus can you find a vacant computer terminal? ... alas you're right this picture was not taken at CSM.

Are we being kept safe from the possible horrors that lurk beyond or are they being kept safe from us?

This room safe can be found in the basement of Berthoud Hall, and although it now contains government documents and files it was formerly a place to safe-keep gold samples.

Where and who is this funny fellow?

Meet Roofus, the cannonization of the stereotypical nerd. You can see him on the southeast roof of Chauvenet Hall.
#7.
Bet you didn’t know “On Golden Pond” was filmed right here on the CSM campus.

Well, maybe not, but potholes such as this one became the scourge of the student driver until 15th Street was closed.

#8.
Hot and sweaty? Tired after those long days spent in lab?

How about those handy showers, but where is the drain? They sure don’t make engineers like they used to.

#9.
Need to be told where to go? Where can you find the tree that points out the directions to such places as Silver City, NM or Darien, CN?

Well take a stroll down the north side of 15th Street up towards Illinois and there you are.
Where can you sit and eat culinary delights while gazing at mysterious numbers with engraved names below?

Well I don’t know where you can get the culinary delights but these brass numbers with engravings below are to be found in our very own “I” club.

Now having taken the test score yourself.

**SCORING**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>a true miner worthy of a stetson</td>
</tr>
<tr>
<td>8-9</td>
<td>not bad but not good</td>
</tr>
<tr>
<td>6-7</td>
<td>you’d better hope for a decent curve</td>
</tr>
<tr>
<td>0-5</td>
<td>you’d better drop this school before graduation</td>
</tr>
<tr>
<td></td>
<td>(drop slip included below)</td>
</tr>
</tbody>
</table>

Return promptly to the Registrars Office

**CSM DROP SLIP**

I __________________ hereby punt this school having done flunked this test

Signed ______________________________

Check if you wish to be sent an application to Wasted, excuse me, Western State.
Athletic Details
Curt Lightle shows his All League form

Lawane Luckett breaks up this play
Coach Marv Kay with some inspirational comments

<table>
<thead>
<tr>
<th>Mines</th>
<th>Opponent</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Western State College</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>Western New Mexico</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>Adams State College</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>New Mexico Highlands</td>
<td>14</td>
</tr>
<tr>
<td>14</td>
<td>Mesa College</td>
<td>31</td>
</tr>
<tr>
<td>13</td>
<td>Ft. Lewis College</td>
<td>14</td>
</tr>
<tr>
<td>9</td>
<td>Univ. of Southern Colo.</td>
<td>14</td>
</tr>
<tr>
<td>16</td>
<td>Southern Utah State</td>
<td>21</td>
</tr>
<tr>
<td>27</td>
<td>Colorado College</td>
<td>14</td>
</tr>
</tbody>
</table>
The Oredigger's display their swarming defense
Coach Dick Stapp gets the point across

The Colorado School of Mines football team ended the 1983 season in seventh place, with a 4-5 overall record, (3-5 in the RMAC). Although the team had a losing record, only one loss came by more than five points. That loss coming from the number two team in the nation, Mesa College.

The Oredigger's did beat long time rival, Colorado College, 27-14. The victory extended Mines' lead in the series to 39-37-5 over the Tigers.

Mines was well represented on the RMAC All League teams, particularly in defense, where, for a time, Mines ranked as one of the nation's leading teams.

On First Team Defense, Mines had defensive lineman Ed Newberry, linebacker Curt Lightle and defensive back Rick Chavez—all seniors. Lightle was fourth in the RMAC in tackles, with 51 unassisted, 56 assisted, a total of 107 and an average of 11.9. Newberry was seventh in the RMCA with 47, 55, and total of 102 and an 11.3 average. Chavez was fifth in the league in pass deflections—10 in nine games. Chavez also had the distinction of the longest interception return of the season—98 yards against Ft. Lewis for a touchdown. Chavez was also third in the RMAC in interceptions—five in nine games for 121 yards and one TD.

In the Second Team Defense was senior defensive lineman Brad Bacon and junior punter Tom Kane. In Honorable Mention were senior linebacker Jeff Osborn and senior defensive back Mark Oberle.

The sole Oredigger representative on the RMAC...
Second Team Offense was senior lineman Scott Dorssey.

Player-of-the-Week honors went to tailback Mike Scialla, linebacker Curt Lightle and defensive back Mark Oberle. Scialla, injured in his fifth game, managed to place eighth in the conference in rushing with 320 yards in 62 carries to his credit. Oberle ranked fourth in the RMAC for kickoff returns. He returned 14 for 232 yards—a 23.1 yard average.

In team statistics, Mines was sixth in rushing offense, with 391 attempts and 1,426 yards and nine TDs—an average of 3.6 yards per carry or 158.4 per game. CSM was also sixth in passing offense, with 101 completions in 232 attempts with 15 interceptions for 1,162 yards and six TDs. In total offense, Mines was seventh.

Things looked better on defense. In rushing defense, the Orediggers were third in the league, allowing only 2.7 yards per carry or 108.9 yards per game. The Miners gave up only eight TDs on the ground. In passing defense, the Orediggers were second in the RMAC, allowing opponents to throw 209-104-10 for a .498 percentage and 1,245 yards—a 138.3 yard per game average. Mines gave up six TDs in the air. Overall in total defense, Mines was second in the RMAC, giving up 2.225 overall per play—247.2 per game.

The Orediggers lost a few close games this year, but characterized the determination it takes every student to get through this fine institution. We’ve got a football team that we can be proud of and count on to do their best each time they take the field.

Skying high, Larry May snags one of his 27 receptions

Mark Oberle (#28), Chris Coughlin (#85) and another Miner stop this ball carrier
The Mines Soccer team had a banner season in 1983, compiling a won-loss record of 10-2-2. The team was undefeated through its first eleven games, and missed the opportunity to represent district 7 of the NAIA in area and national competition when they lost by two goals to Denver University after winning 2-1 in an earlier game. Seven members of the Mines team won all-conference honors, with Rob Zimmerman named to the first team. Second team selections were Jim Whitfield, Don Whitehurst, Bob Woods, and Mike Rosenberg, while Jim Bemelen and Rob Bolin received honorable mention. At one time during the season, the team was ranked fourteenth in the nation in the NAIA polls, and the team finished the season as the fifth ranked NAIA team in the nation in scoring with an average of 3.91 goals per game.
Coach Bob Pearson was voted coach of the year by his fellow coaches and the press. Pearson believes that a coach must build a strong personal relationship with his students, and that friendships can ensue from these ties. "I'm known as an 'easy' coach, he smiles. "but I do reserve the right, and the players know it, to make the decisions. Compromises are important, of course, but my players must do their utmost to win - while enjoying the sport. When graduates return after several years out of school, and make an effort to tell me how much they enjoyed their athletic activities, it shows me why I am a coach - and why I am where I want to be."

"The 1983 soccer season was a real pleasure for the team, the coaches, and the fans. We came within a whisker of going to the NAIA tournament. We are looking forward to next year and the opportunity to try again."

Coach Bob Pearson
<table>
<thead>
<tr>
<th>MINES</th>
<th>Opponent</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Rockford College</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Colo. State Univ.</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Metro State Coll.</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Regis College</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Texas Tech</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Colo. State Univ.</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Regis College</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Rockmont College</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Denver University</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>Colorado College</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Rockmont College</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>Denver University</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Westminster Coll.</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>Air Force Academy</td>
<td>2</td>
</tr>
</tbody>
</table>
Senior Brenda Crumb never lacked in enthusiasm. This was her second year as team captain.
Exciting - the word for Mines volleyball. The team finished with a winning record of 4-2 even game, win or lose, was close however, keeping the fans at the edge of their seats. Mines finished second in the Eastern division of the RMAC to a tough and scrappy New Mexico Highlands team.

"I feel the highlight of the season was taking second at the Metro tournament," comments team captain, senior Brenda Crumb. Coach Gail Klock was impressed with the team's continued improvement throughout the season - especially with the increase in jumping ability. Klock specifically designed the practices to force the Orediggers to jump higher. As a result, many team members increased their vertical jump by 4" or more.

With better jumping ability, and greater height, such as 6' freshman, Theresa Nealon, Mines' blocking ability was enhanced. Strong hitters, Roxie Bowman and Denise Dobkins added an offensive threat at the net. Cindy Carey provided the greatest number of assists. Mines' back row coverage was exceptionally strong with each player being equally capable.

Mine's blocking ability was enhanced. Strong hitters, Roxie Bowman and Denise Dobkins added an offensive threat at the net. Cindy Carey provided the greatest number of assists. Mine's back row coverage was

"Without volleyball, I don't think I would have been able to adjust to Mines."
Becky Wilson, '87

With better jumping ability, and greater height, such as 6' freshman, Theresa Nealon,

---

<table>
<thead>
<tr>
<th>OPPONENT</th>
<th>MINES - OPP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ft. Lewis</td>
<td>2-3</td>
</tr>
<tr>
<td>Rockmont</td>
<td>3-0</td>
</tr>
<tr>
<td>Metro</td>
<td>1-3</td>
</tr>
<tr>
<td>DU</td>
<td>3-0</td>
</tr>
<tr>
<td>Regis</td>
<td>0-3</td>
</tr>
<tr>
<td>Mesa</td>
<td>1-3</td>
</tr>
<tr>
<td>WSC</td>
<td>1-3</td>
</tr>
<tr>
<td>USC</td>
<td>3-2</td>
</tr>
<tr>
<td>Metro Tournament</td>
<td></td>
</tr>
<tr>
<td>-second place</td>
<td></td>
</tr>
<tr>
<td>Regis</td>
<td>0-3</td>
</tr>
<tr>
<td>WNMU</td>
<td>3-2</td>
</tr>
<tr>
<td>NMHU</td>
<td>1-3</td>
</tr>
<tr>
<td>USC</td>
<td>3-1</td>
</tr>
<tr>
<td>Rockmont</td>
<td>3-0</td>
</tr>
<tr>
<td>WNMU</td>
<td>3-2</td>
</tr>
<tr>
<td>Adams St.</td>
<td>0-3</td>
</tr>
<tr>
<td>NMHU</td>
<td>1-3</td>
</tr>
<tr>
<td>Metro</td>
<td>0-3</td>
</tr>
<tr>
<td>Overall Record</td>
<td>13-18</td>
</tr>
<tr>
<td>Conference Record</td>
<td>4-2</td>
</tr>
</tbody>
</table>
Above: Junior Cindy Carey's strong serve was a definite Mine's advantage.
Right: The opponent's attempted spike was successfully blocked by Denise Dobkins and Theresa Nealon.
Right: Consistent back row play was Elaine Hingst's strength.
Far Right: Sophomore Denise was named to the RMAC All-Conference team. She was Mine's number one server and always seemed to come up with the saves.
"Even though we didn’t win the division like we did last year, we were a lot closer team. We had fun, but still worked hard."

Brenda Crumb, ’84

RMAC All-Conference player Roxie Bowman was Mines leading spiker. Her all around play was consistently good.
Wrestling

Right to Left: Chris Roll, Grant Clark, Rod Massey, Shawn Schaefer, Tom Schiff, Mike Ribarich, Roger Peterson, Warren Quintin, and Frank Powell.

Overall: 3-12-1
Few in number and short in experience the odds were against the Mines wrestling team but as a cohesive unit, they pulled together and made an excellent showing.

Mines hosted the RMAC tournament in January. Chris Roll and Mike Ribarich placed second. Chris Roll, Mike Ribarich and team captain Roger Peterson all qualified for the National Association of Intercollegiate Athletics wrestling tournament in Edmond Oklahoma held March 1-3.

Endurance and disciplined training led to a season with minimal injuries and strong continual participation by all wrestlers. Coach John Hancock was pleased with the effort.
Swimming and Diving
The Colorado School of Mines Women's swimming and diving team completed a successful dual meet season, winning five and losing five meets. The team placed sixth in the Colorado College Invitational Relays, second in the RMAC Relays, and second in the RMAC Championships.

Team captain Kristin Westwater, felt the team did well as individuals, but will need more depth to pull the team together next year. Kristin set holds the RMAC record this year for the 400 Individual Medley and is champion for the 200 Individual Medley and the 200 yd. Breaststroke. Jane Hallenbeck holds the record for the 50 yd. Freestyle in the RMAC's along with winning the 100 yd. Freestyle. The women's 400 yd. Freestyle relay, consisting of Julie White, Suzy West, Jane Hallenbeck, and Kristin Westwater, also set a RMAC record this year.

The Oredigger Men finished their season with a dual record of nine wins against three defeats. They placed second in the ISL relays and Championships and first in the RMAC relays and Championships. Five team members, Randy Cox, Dave Roth, Mike Anderson, Hans Stumpp, and Winston Tripp, participated in the NCAA II National Championships held at Long Island, N.Y. Randy qualified in the 50 yd. Freestyle, and also in the 800 yd. Freestyle relay along with Mike Anderson, Hans Stumpp, Dave Roth. Dave, Mike, Randy, and Winston Tripp also qualified their 400 yd. free relay.

The infamous pink team returns for a second season adding new member Mike Bower. Left to Right: Mike Bower, Andy Tammen, Jim Hruby, Dave Roth

Kelly Noonan, right, and Sue Hollingsworth, left, concentrate on their events.
### MEN

<table>
<thead>
<tr>
<th>Mines</th>
<th>Opponent</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>Ft. Lewis College</td>
<td>41</td>
</tr>
<tr>
<td>46</td>
<td>Wyoming University</td>
<td>66</td>
</tr>
<tr>
<td>61</td>
<td>Colorado College</td>
<td>52</td>
</tr>
<tr>
<td>65</td>
<td>Creighton University</td>
<td>28</td>
</tr>
<tr>
<td>57</td>
<td>Metro State University</td>
<td>45</td>
</tr>
<tr>
<td>88</td>
<td>Ft. Lewis College</td>
<td>23</td>
</tr>
<tr>
<td>57</td>
<td>Western State Univ.</td>
<td>56</td>
</tr>
<tr>
<td>38</td>
<td>Denver University</td>
<td>78</td>
</tr>
<tr>
<td>61</td>
<td>Univ. Northern Colo.</td>
<td>44</td>
</tr>
<tr>
<td>41</td>
<td>Air Force Academy</td>
<td>67</td>
</tr>
<tr>
<td>62</td>
<td>Western State Univ.</td>
<td>46</td>
</tr>
<tr>
<td>63</td>
<td>Ft. Lewis College</td>
<td>33</td>
</tr>
</tbody>
</table>

### WOMEN

<table>
<thead>
<tr>
<th></th>
<th>Opponent</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Ft. Lewis College</td>
<td>48</td>
</tr>
<tr>
<td>24</td>
<td>Wyoming University</td>
<td>87</td>
</tr>
<tr>
<td>66</td>
<td>Colorado College</td>
<td>44</td>
</tr>
<tr>
<td>70</td>
<td>Ft. Lewis College</td>
<td>40</td>
</tr>
<tr>
<td>57</td>
<td>Western State Univ.</td>
<td>55</td>
</tr>
<tr>
<td>53</td>
<td>Denver University</td>
<td>59</td>
</tr>
<tr>
<td>47</td>
<td>Univ. Northern Colo.</td>
<td>66</td>
</tr>
<tr>
<td>41</td>
<td>Air Force Academy</td>
<td>69</td>
</tr>
<tr>
<td>55</td>
<td>Western State Univ.</td>
<td>58</td>
</tr>
<tr>
<td>55</td>
<td>Ft. Lewis College</td>
<td>50</td>
</tr>
</tbody>
</table>

Right: The thrill of victory and setting new records is evident on Jane Hallenbeck’s face. Below: The final shave-off! Which razor is best suited for swimmer’s legs?
Seniors, L to R, Robby Okuno, Craig Fulton, Winston Tripp, Dave Roth, and Randy Cox proudly accept the Trophy for RMAC Championship's. This is the sixth year the Men's Team has won the Championships.

Right: Joe Lincoln congratulates other swimmer on his race.
Above right: Team Captain Julie Shultz models the latest fashion, a flashdance swim suit. Left: Swimmers joke with each other during a meet at Ft. Lewis College.
Front row: Mike Dengler, Greg Gurss, Dick Castle, Tim Deigman, Paul Trousil
Back row: Ken Nickerson, Coach Jim Darden, Eric Dupont, George Wayne, Bob Netzel, Pete Koclanes,
Kelly McCarthy, Paul Anderson, Assistant Coach
Bob Pearson, Manager Mark Peak
The 1983-84 Basketball season ended with an overall season record of 11-16 (7-9 in RMAC for a sixth place finish). The team was led by 6'6" forward George Wayne. Wayne led the team in scoring, rebounding, and field goal percentages. Seniors, Bob Netzel, Eric Dupont, Pete Koclanes, and Dick Castle contributed a great deal to the Mines program over the years and will be greatly missed following spring graduation. Paul Trousil, the other graduating senior missed all but 12 games of the season because of a broken ankle suffered against S. Utah. Paul was a 2 year starter and his absence was sorely felt throughout the last half of the season.

Juniors, Kelly McCarthy, Tim Deigman, Mike Dengler, Greg Gurss and sophomore Paul Anderson contributed a great deal to the team and will be looked upon to carry the load in future years. George Wayne was named to the RMAC 1st team All Conference, and Paul Trousil and Bob Netzel were named to the NAIA District 7 All Academic team.
George Wayne: Top percentages in league for scoring, rebounding and field goals

Named to RMAC All Conference

All American Honorable Mention NAIA
JV squad. Back row: Bob Heidelmeier, Mike Madden, Tony Wernsman, Tom Centa, Juan Milian
Front row: Steve Gruber, Brian Reardon, Coach Pearson
Women's basketball

The women’s basketball team had a disappointing year finishing 8th in the conference with an overall record of 6-19. The season was characterized by frustration, however, there were a few positive notes. The Lady Orediggers won 4 out of their last 7 games, and senior guard Claudia Fonio was named RMAC Player of the Week and 2nd Team All Conference.

According to coach Gail Klock, “the team improved a lot at the end of the season.” And although next year’s team will be without three key seniors, Julie Berg, Michelle Bell, and Claudia Fonio, there are a number of talented freshman that with this year’s experience will help to fill the void in the future.
“Even though we didn’t win a lot, basketball always provided a release from Mines that we needed.”

Kelly Hadley, '87

Team captain and leader, Claudia Fonio, breaks away after one of her many steals.

Sophomore Cathy Dingwall exhibits why she is one of the better Lady Miner's defense-women.
"It was definitely a rebuilding year"

Chuck Crowley, '85
During the first meeting of Mines Rugby Club, three goals were brought forth:
1) Play physical
2) tour Arizona over spring break
3) make rugby as enjoyable as possible
After reviewing the season, the Rugby Club says that all goals were met. The Club played nine games and gained valuable experience while winning quite often. Bob Michelle, an excellent player, will be the only rugger to graduate. The team was so young in fact, that four rookies started throughout the year.

The highlight of the season was the spring break tour to Arizona. It was a typical rugby tour: lots of beer and rugby, getting thrown out of every motel stayed in, and many girls left high and dry. Hopefully everyone had the opportunity to see the ruggers in action. Special thanks to Dave Sutcliffe for leading the team into darkness.
The cross country team had a rough season this year. “We had hopes of doing better than we did,” stated Coach Ardel Boes. Next year looks promising for the Orediggers, according to Boes. “I sense the dedication to have an outstanding season. The commitment is there; they’re working hard now and plan on running through the summer.” Doug Tudor and Bob Morris were the co-captains this year. Bob is a 1981 NAIA Academic All-American. Other outstanding runners were Dave Hopp and Maria Johnson.

<table>
<thead>
<tr>
<th>Event</th>
<th>Place</th>
<th>Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western State Invitational</td>
<td>5th in a field of 5 teams</td>
<td>Bob Morris first Mines runner</td>
</tr>
<tr>
<td>Mines Invitational</td>
<td>4th in a field of 5 teams</td>
<td>Curtis Kruse first Mines runner</td>
</tr>
<tr>
<td>University of Southern Colorado</td>
<td>7th in a field of 10 teams</td>
<td>Doug Tudor first Mines runner</td>
</tr>
<tr>
<td>Air Force Academy</td>
<td>10th in a field of 11 teams</td>
<td>Rick McDonald first Mines runner</td>
</tr>
<tr>
<td>University of Northern Colorado</td>
<td>5th in a field of 9 teams</td>
<td>Doug Tudor first Mines runner</td>
</tr>
<tr>
<td>Northeastern</td>
<td>2nd in a field of 5 teams</td>
<td>Doug Tudor first Mines runner</td>
</tr>
<tr>
<td>Colorado College</td>
<td>6th in a field of 10 teams</td>
<td>Pete Boes first Mines runner</td>
</tr>
</tbody>
</table>

Not pictured: Scott Hartley Donald, and Paula Heon.
The Colorado School of Mines Rifle Team led the way this year among CSM athletic teams. Finishing 2nd in the RMAC while beating the ever tough Air Force Academy’s A and B teams on the 31st of March. Ronda Bonan was the most improved firer on the team and a member of the ROTC corps of cadets. Bill London is going on to the rifle Olympic training camp in Colorado Springs this summer. The team finished third nationally among 56 independent NCAA teams. Coached by retiring Master Sergeant Gilbert Magdaleno, this is the team to watch at Mines next year.

<table>
<thead>
<tr>
<th>TEAM MEMBER</th>
<th>HIGHEST SCORE (600 possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>557</td>
</tr>
<tr>
<td>Dale</td>
<td>557</td>
</tr>
<tr>
<td>Bonan</td>
<td>556</td>
</tr>
<tr>
<td>Mishmash</td>
<td>544</td>
</tr>
<tr>
<td>Hill</td>
<td>546</td>
</tr>
<tr>
<td>Freehling</td>
<td>490</td>
</tr>
<tr>
<td>Marquez</td>
<td>498</td>
</tr>
<tr>
<td>Price</td>
<td>492</td>
</tr>
</tbody>
</table>

Julie McDonald shows what it takes to be #1
Dave Good is gettin' after it!

Kim Sanborn displays that awesome form

"We'll be losing our number one racer, Dave Leeds, but with the rest of the men's and women's teams returning, we should do well next year."

Assistant Coach Steve Cr...
The Colorado School of Mines Ski Team, having lost five of its top seven racers, was to be in a rebuilding year for the men. However, with the help of Dave Leeds, Dave Good, and Jim Young, the men’s Alpine team placed consistently in the middle of the field. The Cross Country team was also competitive, with the outstanding performance of Peter Kendrick, who competed in the NCSA National Championships this year.

The women’s Alpine team also did quite well this year. Turning in consistent strong performances for the ladies were Julie McDonald, Betsy Ludwick, and Kim Sanborn. Of the nine women’s teams in the conference, the Mines women’s team finished right around third and fourth consistently.

Mines should be just as strong next year or stronger on all teams next year, as only one team member will be graduating. It seems that Chemistry Prof Bob Witters has certainly gotten together the right formula for his Colorado School of Mines skiing team.
Back Row: Pat Roman, Scott Steinke, Steve Fenton, Scott Meyers, Jeff Allison, Roger Freize, Wayne Hamal, Andy Bond, Mike Home, Coach Darden
Middle Row: Mike Lontine, Troy Hoefer, Ron Mohr, Juan Milian, Brian Doty
Front Row: Mike Harrison, Dean Menardi, Dan Wollenhaupt, Tim Maes, Mike Stewart
"Although the win-
lost record left some-
thing to be desired, we
did accomplish a
great deal with the
young players, and the
team should be much
improved next year."

Coach Darden

The weather-plagued 1983-84 Mines Baseball sea-
son ended the way it started- in snow and cold
weather. The final record of 6 wins and 21 losses
included many close games and outstanding indi-
vidual performances. However, the team lacked
consistency both on the mound and defensively.
The top performers were Sr’s, Mike Stewart at 1st.
Base, Ron Mohr at SS., Dan Wollenhaupt at 2nd.
Base, Mike Home in Left Field, and Mike Lontine
catching. Stewart hit .317 and was named the team
MVP. Underclassmen Wayne Hamal and Jeff Alli-
son contributed a great deal to the team as well as
top freshman prospect Pat Roman. Roman pitched
as well as filled the designated hitter spot and led the
team with a .371 batting average.
This year’s softball team made great improvement going from a previous season’s record of 3-15 to the 1984 record of 8-11. Major contributors to this effort were Roxanne George- best slugging average, Elaine Hingst- top batting average, Kelly Hadley- best fielding percentage, and Julie Gilmore and Linda Pratt with strong pitching performances. Many new records were set including ten individual, six team, and all five pitching records.
"As in past years, the season would have been more enjoyable if the weather had cooperated. Despite adverse effects, (50 mph winds, lakes in right field, and mud up to our knees) I was proud of our enthusiasm and determination not to give up."

Brenda Crumb, captain
All of us entered the 1983-84 season with high expectations after winning the conference the year before by a wide margin and entering our first player in the NCAA II tournament. We had a goal set as a team and coach for a team entry in Division II. Losing our first match to Northern Colo. in February put us out of contention immediately. It seemed the whole year started out less than on a positive note when 4 practice matches this fall were charged to our allowable 18 day season. This meant long periods of inactivity in the spring. The players and I wanted to play a division I schedule hoping this would help in being selected for an NCAA II team bid. We did play well against New Mexico and beat a good team in New Mexico State, but these were the only two matches where we showed the true potential of the team. With everyone returning except our sixth player from last year, the 1983-84 year was a real disappointment. Add to this another disappointment when the best tennis player Mines has ever had, Peter Storch, was passed over for the NCAA II 1984 national tournament, and the RMAC Tournament was snowed out.

By Coach Hancock

Dave Baska shows no fault
MINES OPPONENT
4 5 Colorado
9 0 Regis
8 1 Colo St.
4 5 Colorado
4 5 Northern Colo.
1 8 New Mexico (ranked 18th Div 1)
6 3 New Mexico State
0 9 Arizona (ranked 18th Div 1)
2 7 Grand Canyon College
0 9 AFA
2 7 Colorado
4 5 Colorado College
2 7 Hawaii
2 7 AFA
1 8 Colorado

“We had a better team this year, but all elements were against us.”

Ken Dickerson

Above: Peter Storch - Mine’s number one player

Flavio Montesinos is looking relaxed

Smooth forehand by Ken Dickerson
Lacrosse
Lacrosse 1984 started out with high hopes. The '83 season ended in a flurry with Mines averaging 13 goals in its last two games. In the fall all looked good until 7 player (6 starters) disappeared by the time second semester rolled around. The team showed a great deal of character and thru dedication and hard work, picked up the slack and fought to a 3-5 record. Led by co-captions, Steve Erickson and Joal Ammons, and freshman sensation, York Brogden, the offense averaged 14 goals a game - a record high. The defense, having suffered from the attrition, gave up 13 goals a game. Seniors Mike Bown and Graig Gendron and Sophomores John Wood and John Lambuth contributed greatly to the team effort.

"Team works hard - shows character"

Coach Bruce Allison
"I had three coaches tell me that the Mines group of golfers were the nicest bunch of kids they'd played against. I think this says a lot about what I want to accomplish with Mines golf teams."

Coach Scott Marshall

The 1983-84 Golf season didn't produce any spectacular scores or first place finishes, but did provide the team and Coach Marshall with many rewarding experiences. The team was weakened with the loss of Tom Konrad who used up his eligibility, and the loss of Paul Boucher to Dec. graduation. This narrowed the spring squad down to Brad Neptune, Paul Anderson, Mike Daniels, Jeff Vickers and Brian Dean, all of whom traveled to Las Vegas for the conference tournament. Mines came in 7th place at conference where they had better luck at Black Jack and slot machines than on the golf course. The highlight of the season may have been Mike Daniels hole-in-one at Pueblo West. All in all, the team showed a lot of heart and determination, playing in adverse weather, with very little practice, and against scholarship players from other schools. The team is always spectacular, but gives 100
The CSM Track Team experienced successful indoor and outdoor seasons in the 1983-84 school year.

The indoor season was highlighted with new records being set in seven women's events and seven men's events. The best individual performances was turned in by junior Scott Hartley, who posted a 1:56.1 clocking in the 880 yd. run at the Colorado Univ. Potts Invitational.

The Oredigger thin clads also broke five records in both the men and women's events.

The sixty member squad is made up of mostly underclassmen. Everyone is looking forward to a great year in 1984-85.
Intramurals
## I.M. Champs

<table>
<thead>
<tr>
<th>Sport</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badminton</td>
<td>Blangy/Luengo</td>
<td>Raza/Oiah</td>
</tr>
<tr>
<td>Doubles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basketball</td>
<td>Stray Dogs</td>
<td>The Squirts</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowling</td>
<td>Constance</td>
<td>Hedberg</td>
</tr>
<tr>
<td>Indiv. men</td>
<td></td>
<td>TBA</td>
</tr>
<tr>
<td>Indiv. women Team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross Country</td>
<td>List</td>
<td></td>
</tr>
<tr>
<td>Flag Football</td>
<td>Stray Dogs</td>
<td></td>
</tr>
<tr>
<td>Free Throw</td>
<td>Swisher</td>
<td>Gilmore</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tennis</td>
<td>Bolke/Winslow</td>
<td>Giczewski</td>
</tr>
<tr>
<td>Doubles men</td>
<td></td>
<td>Giczewski/Allen</td>
</tr>
<tr>
<td>Singles</td>
<td></td>
<td>May</td>
</tr>
<tr>
<td>Mixed doubles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singles men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Track</td>
<td>Kappa Sigma</td>
<td></td>
</tr>
<tr>
<td>Volleyball</td>
<td>Double Kill</td>
<td></td>
</tr>
<tr>
<td>Coed</td>
<td></td>
<td>Swamp rats</td>
</tr>
<tr>
<td>3 side men</td>
<td></td>
<td>16th street triplets</td>
</tr>
<tr>
<td>3 side women</td>
<td></td>
<td>Oldies</td>
</tr>
<tr>
<td>6 side men</td>
<td></td>
<td>ASAP Adios</td>
</tr>
<tr>
<td>6 side women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Polo</td>
<td>Ernie Bushmiller memorial</td>
<td>fan club</td>
</tr>
<tr>
<td>Wrestling</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Handball</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doubles</td>
<td>Dickerhoof/Zamis</td>
<td></td>
</tr>
<tr>
<td>Singles</td>
<td>Stermole</td>
<td></td>
</tr>
<tr>
<td>Raquetball</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doubles men</td>
<td>Dunning/Spencer</td>
<td></td>
</tr>
<tr>
<td>Doubles women</td>
<td>Clark/Dunning</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>Spencer</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>Carnell</td>
<td></td>
</tr>
<tr>
<td>Soccer</td>
<td>Internationals</td>
<td></td>
</tr>
<tr>
<td>men</td>
<td>Sigma Kappa</td>
<td></td>
</tr>
<tr>
<td>women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softball</td>
<td>Jerry's Kids</td>
<td></td>
</tr>
<tr>
<td>Fastpitch</td>
<td>Metallurgy</td>
<td></td>
</tr>
<tr>
<td>Slowpitch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swimming</td>
<td>Sigma Nu</td>
<td></td>
</tr>
<tr>
<td>men</td>
<td>Sigma Kappa</td>
<td></td>
</tr>
<tr>
<td>women</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Group
Details
The American Institute of Chemical Engineers is dedicated to widening the horizons of the chemical engineering student. The organization provides information to the students concerning the many types of jobs available in the industry and the assorted talents they may develop.

Included in this is the annual trip to the National AICHE Convention. This year, over ten AICHE members traveled to Washington D.C. to meet with people in the industry and with students from other schools to discuss new and advanced technology. It was also a good sightseeing adventure, because of course, AICHE's biggest function is having a good time as a group.

Officers:
President           John Ignacio
Vice Pres.          Dennis Smith
Secretary           Sandra Abel
Treasurer           Cindy Slater
Publicity           Jenny Poyner
Officers:
President: Kristi Lofgren
Vice Pres.: Loretta Piper
Secretary: Deby Yopps
Treasurer: Kevin Stansbury

AIME - Metallurgy

Officers:
President: Emery Tracey
Vice Pres.: Emrick OndecK
Secretary: John Hird
Treasurer: Bill Dears

AIME - Mining
Alpha Phi Omega is a national service fraternity dedicated to the ideals of leadership, friendship, and service. The men and women of Mu Pi chapter provide numerous services to the campus and community throughout the year. APO at Mines marked its 25th Anniversary in 1983.

Officers:
President    Neil Strain
Service      Dan Arteaga
Membership   Gehrig
             Schultz
Secretary    Jenny
             Poyner
Treasurer    Brad Clark
Lost & Found Andrew
             Hopkins
The Alumni Association is responsible for publishing the Mines Magazine and an alumni directory, sponsoring class reunions and the Mines Annual Fund Drive, and providing an alumni placement service and student loans. Members of the Alumni Association, left to right, are Jean Marston, Corlee Rutherford, Georgia Leidich, Christina Dolen, Kim Shepard, Kathy Breit, Betty Myers, Judy Arbuckle, Kay Alexander, Patricia Petty, and William Mueller.

Undergraduate Alumni Association

The Undergraduate Alumni Association is a student organization that is actively involved in campus life and closely integrated with the Alumni Association. Although only in its second full year as a campus organization, the UAA has established itself by getting involved in many different events.

UAA is responsible for Senior Citizens Day, campus tours, Mines Annual Fund, the used book store, and freshmen finals care packages.

Officers:
President Zane Hammond
Vice Pres. Brad Neptune
Secretary Laura Corder
Treasurer Ward Polzin
Alpha Tau Omega is a social fraternity which has existed on the Mines campus for over 50 years. The members of the Alpha Tau Omega fraternity have a long tradition of scholarship, brotherhood, and having fun. By making a strong show in intramural events throughout the year and achieving the highest G.P.A. of any fraternity.
Alpha Tau Omega has proven itself an active and integral part of the Mines community. The fraternity continues to live and prosper by following the philosophy that, "Life can be a little bit better and easier, if we get together and help each other get through this 'hell' called Mines."

Officers:
President       Doug Moore
Vice Pres.      Scott King
Secretary       Mike Hager
Treasurer       Mike Denicola
Student Council is the governing body of the Associated Students of the Colorado School of Mines, and its primary duty is to properly distribute and oversee the use of student fees.

Among the major events and groups funded by ASCSM are Homecoming, E-day, the Big Event, the Oredigger, and the Prospector. During the 1983-84 year, Student Council was involved in many non-traditional activities, including an El Salvadorian student forum, the re-establishment of check-cashing facilities for students, a community service project laying sod at Ulysses Park, the funding of a Denver Symphony performance at the Green Center, and the obtaining of a word processor for the Oredigger.

The ASCSM Budget Committee was forced to make a 15% decrease in the budget for the next academic year. Student fees were questioned. Why cannot they be raised? Members also debated the selling of the Prospector. However, these questions are for the Board of Trustees to decide.
The student affiliate chapter of the American Chemical Society exists for the interaction between chemistry students and faculty along with professionals from industry. Chemistry students are made aware of the career possibilities available to chemists. Tours and speakers are arranged throughout the year.

Officers:
President David Palermo
Vice Pres. Kevin Andersen
Secretary Chris Rzuteck
Treasurer David Treadwell
E-Day Anya Lorenz

The Baptist Student Union is a student organization to promote Christian growth, fellowship, and outreach on campus. BSU’s activities include Bible study, discipleship, missions, and fellowship activities. BSU also is involved in activities with BSU groups from other campuses in metro Denver. Students from all denominations and affiliations are invited and encouraged to participate.
Miners are proud of their band. The band doubles as a marching band in the fall and a concert band in the spring. The tongue-in-cheek halftime shows at football games have given fans much laughter. One never knows what to expect from the plaid shirted and hard hat clad clan. One thing is sure, however, the band is certain to sound out the "Mining Engineer."

The concert band is very talented and capable of putting on a refined performance during the spring. Director John Shannon is the caretaker of the Geology Museum and carries two master degrees - one in music, the other in geology. Shannon feels that engineers are excellent musicians because of a correlation between mathematical expertise and musical ability.
Beta Theta Pi

Officers:
Fall President
Fall Vice Pres.
Spring President
Spring Vice Pres.
House Manager

John Weihe
Bob McCann
Pat Malone
Phil Glynn
Lawrence Stoiber
1983 marked the 75th Anniversary of Beta Theta Pi at Mines. The house decided early in the year that Homecoming must be special. Plans were made to ensure that the house would be in tip-top shape, both physically and spiritually, when Beta Phi's 75th Anniversary would be celebrated.

The same type of leadership and dedication that the house put forward for the victorious homecoming was continued in other activities as well. In I.M. sports the football team went undefeated in league play, house scholarship was outstanding as usual and, for the first time ever, the Little Sister program has over 50 members.

Beta Phi has survived its first 75 years with honor and dignity; and now looks forward to its next 75. “The good things, never change.”
Since its inception in 1926, Blue Key National Honor Society has continued its role of leadership on the Mines campus, each member pledged to the motto, "Serving, I Live." Eligibility is based primarily on all-around leadership in student affairs and in high scholastic achievement.

Blue Key is a watchdog society that is concerned with Mines Spirit—they take care of the "M" on Mt. Zion which symbolizes Mines Spirit.

Blue Key members are kept busy throughout the year sponsoring NSO, BOT Day, Legislators Day, Parents Day, and Winter Carnival. Other activities include faculty interviews published in the Oredigger, initiating a Neighborhood Watch program, and manning an information booth at E-Day.

Officers:
President        Mike Sattler
Vice Pres.       John Guffey
Secretary        Holly Fliniau
Treasurer        Roberta Nolan
Chi Alpha is a charismatic Christian organization whose mission on the Mines campus is to spread the Word to the fraternity and dorm residents. The group promotes weekly Bible studies at several of these locations. The group regularly meets every Friday evening at the Agape House.

Intervarsity is a non-denominational Christian group. Weekly meetings allow those who attend a chance to relax, fellowship, and listen to speakers giving presentations on all sorts of topics.

Leaders, Barb Smetana, Mike Brittain, and Chris Hansen were responsible for the details of keeping the organization running smoothly. They emphasized prayer and encouraged members to reach out to the Mines campus. Intervarsity urges students to hold small group Bible studies and to have a prayer partner. Square dances, potluck dinners, and trips to the Boulder IV were some of the activities sponsored by Intervarsity.
The Kappa Sigma Fraternity has a good reputation on campus for holding many political offices and excelling in varsity and intramural sports. The fraternity is usually 2nd or 3rd highest in terms of fraternity GPA's and stresses scholastic achievement. Overall, the fraternity is made up of many fine gentlemen who work hard but also know how to have a good time.

Kappa Sigma was founded at the University of Virginia in 1869 and is represented in all but three of the fifty states. The Gamma Gamma chapter was granted a charter at CSM in 1904 - making this year the fraternity's 80th Anniversary.
The Latter Day Saint Student Association was established at Mines to help all LDS students stay closely affiliated with the church of Jesus Christ of Latter Day Saints (the Mormons), so that the students may be successful in their studies while achieving a balanced life.

The LDSSA has institute classes on Tuesdays and Thursdays during lunch, to study the teachings of Christ and His ancient and present day prophets. This year the class continued the study of the Old Testament. The LDSSA also offers students various organized sports programs and activities with other area campus groups. We invite any interested students to attend any of our functions.

Karl Egbert, President.

Married Student Wives
Omega Delta Psi is a new local sorority founded in 1983 by Jill Williford and Chris Millar. The sorority is aiming to become a national sorority within the next year.

For the last two years ODP has sponsored the bed race at the E-Day events. Also, the Phi Gamma Delta fraternity has become the brother fraternity of ODP. The two organizations joined efforts for a float in the homecoming parade and elected queen and beast candidates for the royalty contest.

Omega Delta Psi hopes to encourage more women on campus to take part in their activities. Especially freshmen, who need to meet people and have fun their first year.
The Oredigger Wants You!

Your Student Paper

Slash Occurred
Oredigger Staff Resigns

Editor: Todd Frauenholt
Copy Editor: Deirdre Harris
Feature Editor: Tammy Rupert
Significant Other: Matt Telles
Production Manager: Lanny Kness
Business Manager: Mitch Mather
Local Ad Manager: Brian Bristol
Events and Classifieds Manager: Faith Sublet
Circulation Manager: Kevin Andersen
Production Staff: Cynthia Kraver, Judi Rapisardi, Dawn Hartmann
Writing Staff: Joe Ceurvorst, Robert Johannes, Caren Johannes, Dawnna Measner
Head Photographer: Steve Gallington
Photography Staff: William Lebherz, Patricia Dickman, Bob Bates, C'big Johnson

The deadline for all articles and letters for publication is Friday.
The deadline for all classifieds and events for publication is Friday.
The Oredigger is an independent newspaper published weekly during the academic year except holidays and examination periods, by the Associated Students of the Colorado School of Mines; Second Class Permit No. USPS 41070000 paid at Golden, CO 80401.
Please address all correspondence to Oredigger, Colorado School of Mines, Golden, CO 80401. Telephone (303) 273-3352.
Mail subscriptions are available for $7.00.
Photographers

These people donated the essential part of any yearbook - the photos. The Prospector Staff would like to give special recognition to Randy McGervin whose color shots were fantastic, John McMillian who we wish had been hired sooner, and William Lebherz who came through whenever we were in desperate need.

Julie Berg
Max Bordelon
Mark Bourrie
Dr. W. R. Bull
Brenda Crumb
Brodie Farquar
Holly Fliniaux
Jim Frey
Warren Gaal
Steve Gallington
Mark Hubis
William Lebherz
Art Lee
Randy McGervin
John McMillian
Gina Morrison
Greg Prawl
Chris Roll
Derrik Sanberg
Jonathan Wade
Julie White
and all others
The Fraternity of Phi Gamma Delta colonized at CSM in September of 1983. The colony, called the Delta Colony of Phi Gamma Delta (FIJI for short), was active in a number of events throughout the year. Among their projects was sponsorship of a sugar free Halloween party for diabetic children. In their first semester on campus, the FIJIs obtained the second highest GPA of the fraternities. Colonizing members are, L-R, front to back: Kirk Lindahl, Don Bush, Pat O'Brien, Joe Ceuvorski, Kelly Jameson, Tod LeFevre, Bill Precht, Jeff Epstein, Stuart Schilling, Steve Wilson, John Parsons, Jamie Williams, Rob Chapados, Rob Warren, Nick Ricotta, Gehrig Schultz, Rick Hurdle, and Jonathan Wade.
Prospector

The Prospector staff is pleased to have produced this book for the Mines community. We would like to thank these people: Bill Hill, Activities Director, for his support; Connie Casey, Bill's secretary, for letting us pester her; John Schwappach and Gehrig Schultz, student treasurers, for dealing with our money matters; and Dave Kandel, our yearbook representative, for his guidance. Holly and Audrey want to give special thanks to our staff. They did great work. Staff members, L-R:

Cathy Flaherty
Holly Fliniau - Editor
Chris Roll - Organizations
Audrey Warren - Editor
Warren Gaal - Photography
Claudia Fonio
Julie Berg - Events
Carol Johnson - Students
Todd Banks - Ads
Not pictured:
Sheri Fricke
Brad Neptune - Sports
PROSPECTOR
Scabbard and Blade is a national honorary military organization. The purpose of Scabbard and Blade is to enhance military skills and courtesies and to promote fellowship among future officers. Here at Mines, Scabbard and Blade is responsible for the hosting of the Annual Military Ball.

Officers:
President David Bagley
Secretary Robert Affleck
Treasurer Matt Dvornak

Student Barbarian Council

The Barbs Council had an outstanding year, sponsoring their annual road rally, co-sponsoring with SCAC and SSHA a film presentation, building a Homecoming float along with SSHA, and copurchasing E-Day beer coolers. All council members receive a vote in ASCSM. These votes balance out fraternal organizations at Student Council meetings.

Officers:
President Loren Zweig
Vice Pres. Charles Willis
Secretary Carol Johnson
Treasurer Kevin Dickey
The Student Center Activities Council's objectives and purposes are to maintain and operate the student center for the benefit of the CSM student body; to promote the welfare of the student body.

The showing of "Caligula" by SCAC caused much debate on the campus. Needless to say, it was a sellout. The organization sponsored seven other movies and ten FAC's. Because of SCAC, several students were able to attend the Annual Games Tournament in Arizona.

Officers:
President Michael O'Brien
Secretary Noelle Sears
Treasurer Barb Slayman
Social fraternities play an important role on any campus, but because of the Mines "grind", the Greek social environment is of utmost importance. The Sigma Alpha Epsilon house tries to recognize the need for balanced study and fun time. With a history of wild parties, active little sisters, and competitive athletics there can be little doubt that times do occur there. However, through strict study hours, a tutor program, and organized study sessions, grades have been improving. It would be impossible to make it through Mines without hard work.
Sigma Nu was founded on campus in 1901, making it the oldest fraternity at Mines. Although membership has declined a bit, they are still notorious for their once-a-year "Hot Tub" boxer shorts party, and are the main force in bringing the outstanding E-day fireworks show to life. Sigma Nu stays active in intramural sports and around fun and good times.
Officers:
President       Tim McGuire
Vice Pres.      Chris Kiefer
Secretary       Grant Clark
Treasurer       Tom Riggs
There are no better times at college than those spent in the wholesome activities of fraternal life. The brothers of Sigma Phi Epsilon believe this to be true. They believe that the opportunities found by being a member of a fraternity, especially Sigma Phi Epsilon, are greater than any individual could hope for.
“Our goals are to have a united brotherhood and build friendships that will last a lifetime. After all, we are Sig Eps for life”

Officers:  
President: Ken Rukstales  
Vice Pres.: Dan Barron  
Secretary: Guy Montfort  
Treasurer: John Pease
This year marks the fourth year on campus for the Zeta Pi Chapter of Sigma Kappa. There are now 27 members in the chapter all of whom are active in many other school activities ranging from athletics, SSG, SWE, to having two R.A's among its members. In I.M. sports Sigma Kappa members won the swim meet and also the women’s soccer as well as participating in other school sponsored events.

Single Student Housing Ass.
Throughout the year, SSHA decides upon issues concerning all dormitory residents. In addition, they organize a food committee for the students and hold social gatherings during the year. These activities included in the past, Casino Night and a Halloween bash. SSHA works together with the Housing office to provide for the interests of the residents.

Officers:
President    Warren Snyder
Vice Pres.  Kirk McDaniel
Treasurer   Chris Knott
Secretary   Ellen Eldridge
The Student Chapter of the Society of Petroleum Engineers main goal is to promote a better relationship between students and the Petroleum Industry. The chapter sponsors various educational and social events throughout the school year, such as the "Annual Alderson Hall Challenge".

Officers:
President: Jeffrey Childs
Vice Pres.: Lonnie Kerley
Secretary: Gregg Tripp
Treasurer: Mike Glenn

The Society of Physics Students is a nation-wide organization of students who are interested in physics but are not necessarily physics majors. The local chapter is active in campus activities such as participation in E-day exhibits and sponsoring speakers to talk on subjects of general scientific interest and possibly on job opportunities for engineering physicists. Last year the chapter was recognized as an outstanding chapter by the SPS National Office.

Officers:
President: Jeff Squier
Vice Pres.: Paul Hale
Secretary: Mark Vlcek
Treasurer: Mitch Houston
The Society of Women Engineers is a national, non-profit, educational, service organization dedicated to encouraging young women to consider an engineering education. The objectives of the organization include:

* To inform young women, their parents, counselors and the public in general of the qualifications and achievements of women engineers and the opportunities open to them
* To serve as a center of information on women in engineering
* To encourage women engineers to attain high levels of educational and professional achievement.

As a student section, we feel it is important to hold informative meetings about the questions and options which face today’s engineering students. At a school such as CSM, it is also very beneficial to meet other students and professionals, especially women, in the engineering field. We also have social meetings and events having nothing to do with engineering—JUST FOR FUN!!

Officers:
President       Brenda Crumb
Vice Pres.      Jeanne Koskella
Secretary       Lisa Wagner
Treasurer       Ann Mattson
The Society of Student Geophysicist’s activities and goals are to promote good relations between faculty and students in the Geophysics Department, to keep on top of new developments in the geophysics industry and to promote general comraderie throughout the geophysics undergraduates. The climax of each meeting is the distribution of cookies and milk to each member for consumption and discussion.

Officers:
President       Tim Rosener
Vice Pres.      Terrie Tonkinson
Secretary       Tony Popish
Treasurer       Sam Dennis
Colorado Alpha is the Colorado School of Mine's branch of the Tau Beta Pi National Engineering Honor Society. The main purpose of Tau Beta Pi is to mark in a fitting manner those engineering students who confer honor upon their Alma Mater by distinguished scholarship and exemplary character and to promote a spirit of liberal culture on engineering campuses. Tau Beta Pi is involved in a number of student services. The two most important being a free tutoring service and the faculty evaluation program. Juniors who are ranked in the upper eighth of their class and seniors in the upper fifth of their class are eligible for membership.

Officers:
President        Scott Higgins
Vice Pres.       Steve Dunn
Secretary        Randy Mackie
Treasurer        Vu Dinh
Tau Beta Sigma is the sorority for female band members. Activities include recruiting new band members, organizing band music, and setting the stage up before band practice. Tau Beta Sigma also sponsors a picnic for all band members each spring.

Officers:
President       Tammy Rupert
Vice Pres.      Lynn Mobley
Secretary       Jan Smith
Treasurer       Lisa Sis
Historian       Mary Gates

Kappa Kappa Psi is a national honorary music organization that recognizes outstanding members of college bands. The CSM chapter of Kappa Kappa Psi is responsible for arranging music folders, preparing the stage for rehearsals and concerts, repairing band equipment and instruments, and assisting the band director. The chapter sponsors picnics for band members, and various social activities for Kappa Kappa Psi members during the school year.

Officers:
President Bill Foshag
Vice Pres. Kevin Goosman
Treasurer Gordon Pierce
Secretary Dave Seymour
Theta Tau is an honorary engineering fraternity that provides many services during Mines traditional events. Theta Tau has always been actively involved in homecoming and E-Day, and more recently has become a major force in pulling off Mine's favorite party-The Big Event. Theta Tau is made up of many of Mines' "heftier" individuals and will continue to uphold the reputation of excellence and dedication that it has always held throughout the past.

Officers:
President: Scott Deits
Vice Pres.: Andy Ondish
Secretary: Pete Berglund
Scribe: Mike Read
Senior Details
Mary Abele, CPR
Kevin Anderson, CH

Larry Arnold, CPR
David Bagley, CPR

Mike Baldus, CPR
Todd Baucom, PE
John Bauer, GP
Michelle Bell, GE
Julie Berg, CPR

Shari Berger, CPR
Peter Bierbaum, CPR
James Blackwell, MN
Bob Brady, PE
Kenneth Brettmann, GP

Thomas Brinegar, CPR
Brian Bristol, PE
Karl Brockmeier, PE
Scott Brooks, GP
Darren Brown, GE

David Brown, GE
Kevin Brown, MN
Eric Brudie, GE
Douglas, Buckland, PE
Grant Burchell, CPR

Michael Burns, MT
Don Bush III, MT
Louis Callahan, MN
Richard Castle, CPR
Joe Ceurvorst, CPR
Sherri Fricke, PE
Gerald Froese, MN
Craig Fulton, MN
Randall Furst, GE
Steven Gallington, GP

Arvind Gang, PE
David Garrison, EG
David Glaister, CPR
David Goddard, MN
Barbara Goodman, CPR

Kevin Goosman, GP
Susan Gudath, CPR

John Guffey, PE
Kevin Haley, GE

James Lee Hancock, MN
Barry Hanenburg, GP

Ronald Hanslip, PE
Steve Harpham, GE
Garry Harris, GP
Roland Hea, MN
Jennifer Hill, GE

John Hird, MN
John Hoff, GP
Howard Holden, MT
Michael Horne, MN
Brian Huff, PE
Kathryn Humpert, GP
Stephen Humphries, GE
Lynn Hunter, CPR

Mark Happenthal, PE
Doug Huxley, CPR
John Ignacio, CPR

David Ito, MA
Robert Johannes, GE
Andy Johnson, PH

Peter Johnson, MN
Jacqueline Joyce, CPR
Timothy Joyce, CPR
Sean Kelly, GE
Lonnie Kerley, PE

John Kirkpatrick, GP
Lyle Knepp, PE
Robert Knight, CPR
Jeanne Koskella, CPR
Michael Kraeski, CPR

Steven Kranker, PE
Cynthia Kraver, MA
Eric Krein, CPR
Phillip Kriz, PE
Mitch Kruse, EG

Alice Kuehn, GP
Gerald Lane, CPR
Randy Latta, PE
James Lee, GP
Jeffery Lee, GP
Alan Lindsey, GP  
Nancy Little, MT  
Brett Locke, EG  
Kristi Loigren, MT  
Brian Love, EG  

David Macary, CPR  
Randall Mackie, GP  
Christopher MacLeod, GP  
Ward Mahanke, GE  
Jody Mangus, PE  

Sherri McCasland, EG  
Paul McCulliss, PE  
Kirk MCDaniel, MN  
Rick McDonald, EG  
TY McKercher, MA  

Art Menzer, GE  
Jim Millerr, MN  
Mark Montoya, EG  
Kevin Moody, PE  
Patrick Moore, CPR  

Daniel Morris, GP  
Bob Morris, CPR  
Robert Moskui, PE  
Monika Mosimann, GE  
John Mueller, GP  

Olivier Muff, GE  
Todd Nash, CPR  
Deborah Neev, GP  

Joseph Nelson, PE  
Shelley Nemanic, MN  
Bradley Neptune, MT
Michael Scherrer, GP
William Schneider, GP

Stephen Schwarz, GE
Craig Schwyn, GE

David Seymour, MT
Kary Shafer, PE

Cynthia Slater, CPR
Brick Smith, PE
Bruce Smith, PE
Dennis Smith, CPR
Alex Smulders, GP

Simone Southall, PE
John Stafshtolt, PE
Robert Sterner, MN
Jerome Strahan, MN
Matthew Strever, PE

Thomas Strong, CPR
Edmond Suher, GE
William Tanaka, GE
Matt Telles, MA
David Tenney, GE

Thomas Tharp, GE
Jamie Tiglas, EG
Brian Tilton, GE
Frank Toney, MT
Terrie Tonkinson, GP
Mark Degenhart
Tom Dinger
Ellen Eldridge
Kevin Elliott

Leslie Faccini
Mohammed Faraj
Patti Ford
Roger Freize

Robert Fries
Brain Forbes
Fritz Foss
Richard Gaber

Guillermo Gaviria
Susan Giezewski
Julianna Gilmore
Carla Grano

Chris Goetz
Marta Green
Chris Grey
Greg Gurss

Todd Hackett
James Hall
Erik Hansen
William Hill

Glen Honstein
David Hopp
David Howard
Gary Huber
Clayton Plucheck
Jennifer Poyner
Linda Prall
Andrew Prestridge
William Pretsch

Jon Price
David Provan
Barry Pruitt
Gregg Rago
Mark Reid

Kevin Revels
Douglas Roberts
Stuart Robertson
Michael Rosenberg
David Roth

David Rothers
Arnold Sanchez
Robin Sandell
Kevin Schuebel
Mark Schiller

Paul Schultz

Stephen Schultz

John Schwappach
Kevin Shaffer
Cindy Shade
Jeff Simmons
Lisa Sis
Barbara Slayman

Brian Smith
Tom Stahr
Thomas Stark
Neil Strain
Robert Stroud

Jeff Styers
Faith Sublett
Rick Tallman
Tracy Taylor
Kathy Theisen

James Thorson
Theodore Tjeriandsen
Michael Torline
Robert Tudor
Jeff Warman

Audrey Warren
Robert Wendt
Dee Wikstrom
Jim Wildharber
Michael Wotovitch

Ann Wright
Debby Yopps

Kristin Zembeck
Sophomore Details
Rachmat Abdoellah
Ed Aho
Dean Aker
Grant Alexander
James Alsup

Robert Anzick
William Austin
Dana Bargell
Linda Battalora
Darrin Baumunk

Scott Bechuel
David Becker

Janet Bensema
Steve Biagiotti

Peter Boes
Susan Bolis
Michael Brauer
Jeff Braun
Kathryn Buess

Russell Bundschuh
David Camille
Paul Campbell
Michelle Cheever
Christine Claypool

Peter Crisi
Tracy Czech
Kirsten Derr
Cathy Dingwall
Denise Dobkins
Freshman Details
James Kneedler
Bernie Kuta
Timothy Lane
Darren Langton
William Lebherz

Charlotte Ledall
Tod LeFeure
Shannon Leikam
Tom Lessard
Thomas Lewis

Joe Lincoln
Byron Lindros
Allison Lovato
Mary Ludwick
Nancy Lynch

Catherine Mader
William Mallett
Daniel Mar
Frank Market
Melanie Marquardt

Gary Matthews
Alex May

Charles McConnell
Carrie Melville

Mike Miks
Marla Miller
Mohamed Abdelmalik  
Mark Bourrie  
Felipe Calizaya  

Ramiro Camahuali  
Brian Cheney  
John Richard Craig IV  

Brent Evans  
Gary Hemphill  
Richard Jolk  

Peter Kaczkowski  
Thomas Majewski  
Philip Meis
The CSM Board of Trustees and the Master Plan have set a sense of direction for Mines—That CSM will strive for an enhanced graduate education and research program. The 1983 Keystone Conference focused on how to move in that direction, while maintaining a sensitive balance between excellence in undergraduate and graduate programs. In effect, the trustees, administrators and department heads used the Keystone Conference to construct a conceptual gyro scope to help the School maintain direction and balance.
Administrative Details
Front row, left to right: Trustee Don Henderson (secretary), Trustee Jim Wilson, Trustee Fred Schwartzberg (president). Back row: Student Trustee Lon Rosenweig, Trustee Monte Pascoe, Trustee Russ Wood (vice president), Trustee William Coors, and Trustee Jack Warren
Samuel Romberger
Dean of Grad.
Students

Kathy O'Brien
Student Devel.
Center Coord.

Bill Hill
Student Activities
Director
Gordon Scott  
V.P. of Business Affairs

Chuck Morris  
Public Relations

Robert Hensley  
Admissions
Diana Doyle,
Student Development

John Golden,
Dean of Faculty

Brodie Farquhar,
Public Information

Liz Foreman,
Assistant Director of Student Housing

Warren Mason,
Financial Aid Officer

Carl Fawcett,
Director Student Housing, Student Center and Green Center
Faculty Details
The Department of Physical Education and Athletics offers a 4-fold physical education and athletics program which includes: (a) required physical education, (b) intercollegiate athletics, (c) intramural athletics, and (d) recreational athletics. The School is a member of the Rocky Mountain Athletics Conference, and the National Collegiate Athletic Association.
The George R. Brown Computing Center on the second floor of the Green Center was formed in 1965 to provide computing services in support of instruction, research, and administration. The Computing Center operates on a free-access quota system. Computer services are available without charge to all students and faculty.
Secretary,
Dixie Brough
Department Head,
George Kennedy

David Anderson
Scott Cowley
Steve Daniel

Kenneth Edwards
Jim Guilianelli
Gunther Holzer
The lower division chemistry curriculum is a sequence emphasizing the basic concepts of chemistry. The first year deals with atomic and molecular structure related to chemical and physical properties, chemical bonding, qualitative and quantitative analysis. The second year deals with fundamental physical chemistry, emphasizing thermodynamics, chemical kinetics, and electrochemistry.

The undergraduate chemistry curriculum has a mineral-oriented flavor and is designed to prepare students for careers in industry or entrance into graduate school.
Chemical Refining

Florence Fruhwirth,
Secretary
A.J. Kidnay,
Department head
The degree in Chemical Petroleum Refining Engineering is an accredited degree in chemical engineering as approved by the American Institute of Chemical Engineers and the Accreditation Board for Engineering and Technology, Inc. Traditionally, chemical engineers have been responsible for developing, designing, building, and operating chemical plants to satisfy the needs of modern society. Chemical engineers work in such diverse industries as gas and oil production, petroleum refining, steel, plastics, electronics, vegetable oils, and soaps, and textiles.
The Engineering Department offers a design-oriented program leading to a Bachelor of Science degree in engineering. This program is designed to meet the need for engineers in the mineral and energy industries who have a knowledge base uniquely oriented toward specialties in civil, electrical, and mechanical engineering. Graduates find employment with consulting and manufacturing firms, utilities, petroleum and mining companies, and construction firms, as well as with governmental organizations.
Secretaries,
Karen Brouwer
Marilyn
Schwinger
Department Head,
Joseph Finney

Eric Nelson
John Lufkin
Harry Kent

Kenneth Kolm
Emmy Booy
Rudy Epis
Geology is a many-faceted study of the earth—its composition, its history, and the processes which are at work in the interior and on the surface. Geological engineering consists of the joint application of engineering and geological principles to the problems of analysis and design in the engineering activities directly related to the earth, its materials, structure, and forces. This course of study leads to a broad background in the basic phases of geology, but the student may also pursue specialized interests in areas such as structural geology, stratigraphy, mineralogy, petrology, paleontology, mineral deposits, soils, groundwater hydrology, and geomorphology.
The art and science of geophysics has grown over more than half a century in response to the need for scientific methods of locating mineral resources, energy supplies, and environmental hazards. Over this period, the Department of Geophysics at CSM has provided training in the application of geophysics to practical problems. The student is required to become thoroughly familiar with mathematical and physical theory.
The CSM Department of Humanities and Social Sciences has a unique function: to effect the integration of the varieties of knowledge and values that engineers use in their private, public, and professional lives. The department emphasizes logic, critical awareness, and clarity of expression.
Mathematics is the language of science and engineering. All students at CSM study mathematics through three semesters of calculus and an additional course beyond the calculus in differential equations, statistics, or numerical analysis. For the student who wishes to major in the mathematics option, the Department of Mathematics offers programs leading to degrees at the bachelor’s, master’s, and doctoral levels.
Metallurgical engineering includes all engineering aspects of the recovery of metals from ores, their adaptation to human needs and their behavior as the principal engineering materials of modern civilization.

Metallurgy as a science is, in part, physics and, in part, chemistry. However, as an engineering discipline its aims are creative, industrial economics, marketing, and human relations as important keystones.

The course in metallurgical engineering at CSM provides an introduction to the three principal departmental divisions: mineral processing, production and refining of metals, and physical metallurgy, with opportunity for some specialization by means of elective courses.

The School’s mineral processing, extractive and physical metallurgy laboratories are among the most modern in the nation.
George Krauss
Elliot Brown

Rex Bull
Charles Natalie

David Olson
David Spottiswood

Albert Schlecten
David Matlock
Gerard Martins
Glen Edwards
The Department of Mineral Economics offers undergraduate courses in economic principles. Additional undergraduate elective courses in management science/operations research and applied economic theory are based on practical business management and decision making. These courses are designed to complement the scientific and engineering curricula.
John Moore
Robert Murphy
Anshumali Gangwar

Michael Buckenham
David Fletcher
Franklin Stermole

Lynde Gilliam
Thomas Kaufman
John Cordes
The demand for minerals of all kinds today is higher than it has ever been, and it continues to increase at an alarming rate as the nations of the world strive to improve their standards of living. It is the task of the mineral industry and the people in it to supply these needs. The function of the mining engineer is to apply knowledge of pertinent scientific theory and improved technology to recover these resources. The importance of ecological and environmental planning is recognized and given strong consideration in the mining engineering curriculum.

Department Head,
Thys Johnson
Secretary,
Rozaland Taylor

George Clark
Fun-Den Wang
John Abel

Robert King
Matthew Hrebar
William Hustrulid
The early portion of this program is coordinated with all fields of academic study. This part of the program acquaints the student with the additional opportunities afforded to pursue both a degree and a commission simultaneously.
The primary objective of petroleum engineering is the finding, development, evaluation and recovery of oil, gas, and other fluids in the earth. The petroleum engineer studies drilling techniques, subsurface evaluation, oil and gas production methods, hydrocarbon fluid properties, rock properties, underground fluid behavior, industry economics, the management of operations, and the application of mathematics to various phases of drilling, production, and fluid flow.
The Department of Physics offers undergraduate and graduate degrees in physics, with emphasis on applications to energy and minerals-related fields. The required courses include classical mechanics, electricity and magnetism, modern physics electronics, and optics.
The Golden Ram Restaurant (formerly the Carriage Room) has been satisfying hungry Miners' appetites for decades.

Join us today and enjoy a cold bottle of beer or glass of wine with your meal. Friends meet at The Golden Ram Restaurant over our famous breakfasts, lunches and dinners every day. Open: 6:30 a.m. - 8:00 p.m. Daily 6:30 a.m. - 2:00 p.m. Sunday Located upstairs from Foss Drug at 822 13th St. in Golden

GOLDEN CHIROPRACTIC CENTER, P.C.

Dr. Richard A. Bergeron

* X-Ray Facilities
* Insurance Accepted
* Workman's Compensation
* Personal Injury
* Auto Accident

FAMILY CHIROPRACTIC CARE

NO CHARGE FOR CONSULTATIONS

2401 Ford - Golden 278-1550

THE GOLDEN MEDICAL CLINIC

"A FAMILY HEALTH CENTER"

G.R. Gjellum, M.D.
J.M. Sharkey, M.D.
J.H. Gale, M.D.
C.W. Watson, M.D.

THE KNOWLEDGE OF THE PRESENT

THE DEPENDABILITY OF THE PAST

1823 Ford Street
Golden, Colorado 80401

Telephone 279-7644

Business Hours
Monday through Friday
9:00 A.M. to 12:30 P.M.
1:30 P.M. to 4:30 P.M.

Extended Office Hours
Monday through Thursday
4:30 P.M. to 8:00 P.M.
Saturday 9:00 A.M. to Noon

Doctor Available 24 hours
every day of the year
The Diamond Drill Handbook
by J. D. Cumming

Since 1951 the Diamond Drill Handbook has maintained pre-eminence as the only comprehensive reference book on the principles of Diamond Drilling.

Engineers, geologists, drilling contractors and educators in 115 countries use the Diamond Drill Handbook as their prime source of information. Demand for the second edition necessitated four printings.

The revised reprinted Third Edition (with hardcover) is completely updated and contains new subject matter including wireline drilling, the use of mud as a drilling fluid and information on the standards that have been adopted in countries using the metric system.

The Diamond Drill Handbook is a must for every mining engineer, geologist, drilling contractor, exploration manager and university library. Use the order coupon below to secure your copy. Price per copy is $30.00.

CHAPTER HEADINGS

I HISTORY OF DIAMOND DRILLING
II USES OF THE DIAMOND DRILL
III DIAMOND DRILLING FOR THE LAYMAN
IV OTHER DRILLING METHODS
V THE MECHANICAL FEATURES OF A DIAMOND DRILL
VI THE DIAMOND
VII BITS FOR DIAMOND DRILLS
VIII OVERBURDEN
IX CEMENTING AND CASING OFF DRILL HOLES
X DRILLING FLUIDS, WATER, AIR, BRINE, MUD AND OTHER MEDIA
XI CORE HANDLING, LOGGING AND STORAGE
XII SLUDGE COLLECTION
XIII SPECIAL APPLICATIONS OF DIAMOND DRILLING
XIV WEDDING DEVICES AND DIRECTIONAL DRILLING
XV SURVEYING DRILL HOLES
XVI COMPUTATION OF DRILL HOLE MEASUREMENTS AND CHART

Available for $30.00 plus $5.00 postage from:

J.K.S. INDUSTRIES INC.
1722 S. Golden Rd.
Golden Colorado
279-7155

The Prospector staff is pleased to conclude the 1984 yearbook with congratulatory remarks from some of the parents of the Class of '84. We thank all of the parents who made contributions - they made the following pages possible. Finally, we offer our own congratulations to the Class of '84. Way to go!

Stephen P. Schwars:
Way to go! Keep your cool in Houston! We love you!
Mom, Dad, and girls

Mike Harrington:
Congratulations!
Steve, Colleen, Kelly, Mom and Dad

Bob Netzel
Congratulations, Bob! You have progressed from bus boy to books and basketball and soon to be beach boy and billionaire!
God bless you, Mom and Dad

Jeffrey Squier:
You have enriched our lives by your outstanding achievements.
Love, Mom and Dad

John Cookson:
Congratulations and love! We're bustin' our buttons!
Mom, Dad, and your brothers and sisters

Peter Koclanes:
Congratulations! Each dawn has a new beginning - climb far, your goal the sky, your aim the star.
Carol

Randy Mackie:
You have exceeded our hopes and expectations. Your life has been our joy.
Love, Mom and Dad

Kary Shafer:
Congratulations and best wishes for your future plans. We're very proud of your success!
Love, Dad, Sue, Kati, and Jennifer

Bill Crawford:
Congratulations. We are real proud of you.
Dad and Mom

Stuart L. Wilson:
It is impossible to express all of our pride in your accomplishments but we want you to know that the summer of 1983 topped off with May 5th, 1984 will be milestones for us.
Mom and Dad

Brad Warner:
It is impossible to tell you in words how elated and proud we are that you have succeeded so well these last four years. We love you and will be with you in whatever path of life you choose.
Mom and Dad

Craig Schwyn:

Congratulations! We're proud of you! Your determination, drive, and cheerfulness will take you far.
Love, Mom and Dad

Olivier Muff:
Congratulations for your superachievements and best wishes for a happy career.
Love, Mom and Dad, Claude, Toby and Sam

Dean Shanklin:
You have excelled in preparing yourself to serve your country and mankind in search of knowledge. Go and do. We are proud of you.
Your family

Sherri Fricke:
Congratulations!
Jerry and Norman Fricke

Steve Kanker:
Always remember the pride we have in you, the joy you’ve brought into our lives, the immense love for you in our hearts.
Mom, Dad, Kirt, Scott, Marianne, Jason, Michelle, Keith

Ron Hanslip:
For a job well done. We wish you the best in your
 Proud of you!
Our love, Mom and Herb

Peter Bierbaum:
Continue to utilize your creativity while living life to the fullest. So proud of you.
Mom and Dad

Gregg Tripp:
With love, faith and enthusiasm, all things are possible - you are the proof - your proud family
and friend salute you on this most wonderful occasion!

The Tripps

Grant C. Dewey:
Grant, your family and friends congratulate you for a job well done and wish you the very best in
your future.
Love, Mom and Dad

Scott Affelt:
Conglomerations! When you left home you couldn't even SPELL graduit. Now you IS one. If
you don't get a job, come home. The house needs painting.

Love, Mom and Dad

Hyung Yoon:
Where there is a will, there is a way! Way to go!

The Yoons

Kenneth L. Brettmann:
You so fill my heart with joy it almost breaks; let your
passion for knowledge and wisdom never diminish in its quest; follow your dream wherever
it may lead; in your uniqueness you stand tall amongst others; you are truly loved, my son.

The Brettmanns

Kevin Moore:
After all these years of study and hard work, may
this preparation help you face tomorrow peacefully and confidently.

Love, Mom, Dad, Kelby, Robert and Karen

Kevin Haley:
Congratulations, Kevin!
With love. Mom, Dad, Colleen and Chris

Van E. Housman:
Congratulations for a job well done. We are very
proud of you. You are one really neat person to be
associated with.
All the Housman Family

Ashby McMullian:
Congratulations! We're all so proud of you.

Love, Mom, Dad, and Janie

Barry Fitzsimmons:
Congratulations upon your graduation. Here is
wishing you happiness and success in the years to come.

Peter, Judi, and Stef

Roland Hea:
Congratulations! You have passed the test of
intelligence, hard work and endurance.
Your Proud Family

Jim Frey:
You done good, Jim! We're proud of you!

Mom and Clark

Matt Burrows:
It's more than what you've done that makes us
proud. It's what you are!

The Burrows

Pete Wynne:
Tip the Aged P, a Nod, Pete. Congratulations!
Mr. and Mrs. Peter J. Wynne

Arvind Garg:
You were admitted to CSM as a freshman at age
15 and now you are graduating at age 20. We
admire you and are watching your promising
career with great expectations. God bless you with

“Grandparents” Shirley and Bill Claire

Dave Ito:
Congratulations, Dave. May the future be
prosperous with good health and success.

The Itos

Mike Daniels:
Our love and pride in you and your
accomplishment couldn't be greater.
Your family

Alice W. Spencer:
Congratulations, To a chip off the old rock!

Mr. and Mrs. Charles W. Spencer

Darren Brown:
Way to go! Congratulations.

Mom and Dad and Derek, David and Dawn

Mike Sattler:
Congratulations on your graduation from Mines.

Mom and Dad and family

Holly Flinian:
Four years of toil and midnight oil,

At last the goal is near.

Let's tip a schooner to this piano tuner,

who'll soon be an engineer.

Holly, you have proved the theory that good

cookies don't crumble.

Cheers and love, Mom and Dad and Kyle

Kris Cochran:
Leap year is a very good year!

Mom and Dad

Tom Ilebone:
Someday may God bless you with a son, that will
give you as much pride and happiness as you've

given us.

Love, Mom and Dad

Andre Brown:
Congratulations. we wish you all the luck in the
future.

Love, Dad and Mom

Gerry Froese:
Congratulations! May you have a successful
mining career.

Mom and Janice

Steve Emmer:
We're all proud of your accomplishments in
college and know that you will continue your
success in the future.

Love, Mom, Dad, Dan, and Mike
Randy Sullivan:
The dream of a degree is yours! May all your dreams come true!
Your Proud Family

Alan Jewell:
Congratulations to number one son and brother for a well done accomplishment.
Deanna, Denise, Dad

Robert Philbin:
Congratulations on a great accomplishment. And then - on to Princeton!
Love, Mom, Neil and the gang.

Ronald Mesick:
Well done! We knew you'd make it!
Love, Mom and Dad

Scott Ryan:
It's been four long years, but we knew you'd come through.
You have made your folks very proud of you.
Mom and Dad

Joe Cignoli:
Congratulations! Your determination has opened the door to an exciting and adventurous future.
We're proud and happy for you.
Mom and Dad

Scott Hamburg:
Congratulations for a job well done, Scott. We are very proud of you.
Mom and Dad

Bill Dunning:
I hope you enjoy a life of sensitivity, goodness, and accomplishment. I am very proud of you. I love you dearly.
Mrs. Madeleine Dunning

David Treadwell:
This graduation message will make sense if you consult the elements.
4-16-52 74-53-16-2-16 87-8-25 9-85-1-68, 42-90-68, 11-7-6-39, 18-60 18-7-10
The Treadwells

Kim Trotman:
Your boat floats, happy sailing Kim. We are so proud of you.
Love, Mother and Jerry

Buddy Moskal:
Hi Buddy - We are all so very proud of you!
Love, Mom, Dad, Sonny, Rick and Patti

Jerry Olsen:
Congratulations and best wishes for the future.
The Lee Family

Rinky Dink:
Congratulations! The folks at 4911 Loosestrife are proud of you and love you.
The Randall's

Butch Waidelich:
Congratulations - Wishing you a future full of success.
Mom and Dad

Tony Popish:
Tony, Congratulations on your graduation!! We're very proud of you and love you and wish you all
the very best for the future.
Love, Mom and Dad Popish

Scott Godfrey:
It's a great achievement, Scott. Congratulations!
From your very proud Mom

Bill Gabella:
“Aspera Ad Astra!” Bon Chance!!
Your Family

Mary Meagher:
It was a long hard 5 years, but we knew you could do it even when you thought you couldn't.
Congratulations on your achievements - We are very proud of you.
Love, Mom and Dad

Holly Flintau:
Let your grandparents' love, pride and happiness reflect in your graduation from CSM.
From Peter Hans and Eileen Lepponen

Brian D. Flinn:
From one metallurgist to another - Congratulations! But keep studying and be a top professional all your life. It's fun.
Dad and Mom

Delbert Grotevold:
Four years of midnight oil and nail biting have come to an end. May your efforts help you prosper for the rest of your life.
Proud Mom and Dad Grotevold

Emery Tracy:
Congratulations on a job well done. We wish you continued success.
Love, Mom and Dad

Tom Caldwell:
We are proud of you.
With rose petals and love, Mom

Frank E. Uhlrik:
Congratulations, Frank. May your fondest dreams come true.
Love, Mom and Dad

Vu Phuc Dinh:
Congratulations. We are proud of you. Keep it up.
Love, Mom and Dad

Brian Huff:
Congratulations to our CSM graduate of 1984. Best wishes for success in everything that you pursue. Much happiness in the years to come. Good luck and love.
Mom, Diane, Jonie, and very special person Cindy

Jim:
Yeah! Jim! Patty Catherine, Liz, Ellen, Clair, and Susan

Bob Morris:
Dear Son. Congratulations on obtaining one of life's loftiest goals - a goal that could not be obtained without a great deal of dedication and personal cheer. Always keep your faith in Christ and the mountains will become hills and the rivers mere streams.
Love Always, Mom and Dad

Mr. Adams:
Congratulations on your graduation. You have all the necessary qualifications to make great strides in your chosen career.

Dr. Johnson:
Your success is a source of great pride to us in our family and we are very proud of you.

The Adams Family

The Johnson Family

Thank you for your hard work and dedication.

The Adams Family

The Johnson Family
In memory

Tim Boyle
Summer 1983

Trevis Miller
Summer 1983

Prof. Philip F. Dickson
Fall 1983

Prof. Richard D. Gauthier
Fall 1983

Sean Driscol
Fall 1983

Prof. Albert W. Schlechten
Winter 1984