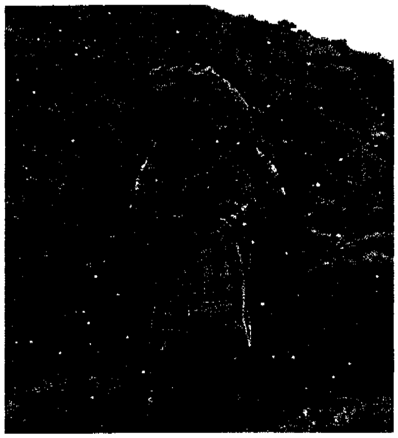
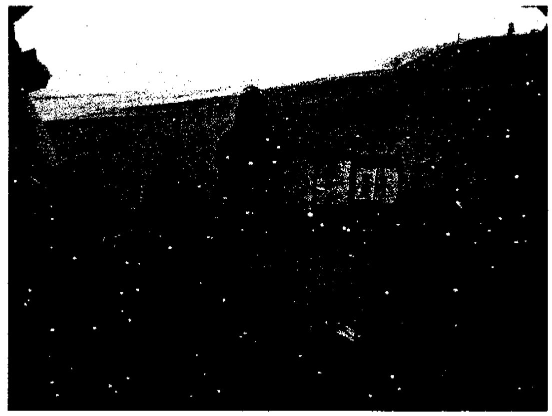
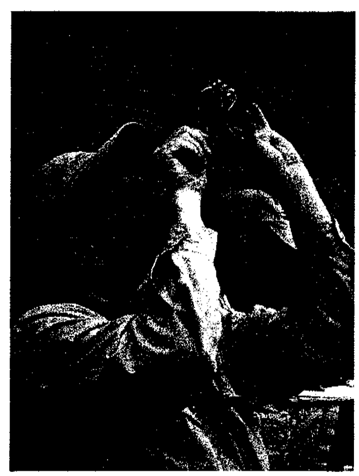
GROSSMONT COLLEGE
DEPARTMENT OF EARTH SCIENCES





PROGRAM REVIEW
SPRING 2013

PROGRAM REVIEW 2013 SIGN OFF SHEET

Full Time Department Members

Gary Jacobson (Geology/Oceanography)

Tim Cliffe (Geography)

Chris Hill (Geology/Oceanography)

Mark Goodman (Geography)

Judd Curran (Geography)

Scott Therkalsen (Geography)

Adjunct Department Members

Geology/Oceanography:

Memorie Yasuda

Jenny Duncan

Robert Konningsor

Franceen Kakavoulis-Perera

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SECTION 1 - BRIEF DESCRIPTION AND HISTORY OF THE PROGRAM

1.1 Introduce the self-study with a brief department history. Include changes in staffing, curriculum, facilities, etc.

Geography and geology, established as disciplines at the inception of the college in 1961, became part of the current Earth Sciences Department in 1972. Within the newly-formed department, Lee Englehorn and Wayne Harmon (starting in 1967) taught the geography course offerings, while Ray Resler taught the General Geology lecture and lab. Historical Geology, a major's course, was added to the geology curriculum in 1968. A major's Physical Geology 120 (lecture/lab) course was also offered but was eventually discontinued because of overlap with General Geology.

Explosive growth campus-wide prompted expansion of the department in the early 1970's with the hiring of two more full-time geographers (Lee Shadell and Mike Matherly) and another full-time geologist (Shannon O'Dunn). The Geography curriculum grew with the addition of a Physical Geography Lab, Meteorology, California Geography, and an Urban Technology program, creating the largest such program of any offered within California's community college system. The Geology curriculum also expanded, adding two 4-unit field-based courses (National Parks and California Geology) in 1972. Mineralogy was also offered but low enrollments forced its cancellation. In the mid-1970s, a cross-disciplinary Oceanography course was developed, eventually evolving into two separate courses, Marine Biology and Physical Oceanography.

By 1980, major funding, demographic, staffing and job market changes prompted many changes in the Earth Sciences Department. Proposition 13 eliminated funding for the full time technician who had archived and reported Grossmont weather station data. The Urban Technology program and the Economic Geography course were dissolved though Urban Geography (Geog 160) was retained as a strong GE course.
On the personnel front, Shadell retired in 1983 and was replaced by adjunct faculty. O'Dunn left the department to write grants for the District in 1986 (later returning in 1991). General Geology sections were reduced and Oceanography emerged as an extremely popular alternative. Thus, Gary Jacobson was hired in 1989 as a Geology-Oceanography instructor to fill the gap. The 1990's saw the retirement of Lee Englehorn who was replaced by Tim Cliffe in 1991. Ray Resler retired in 1995, followed by Wayne Harmon in 1997. Mark Goodman was hired as a full-time replacement for Wayne Harmon in 1999. In summer of 2000, Shannon O'Dunn left the department to take a position as a Dean (Communication and Fine Arts) and Chris Hill was hired to replace Shannon in Fall 2002. The senior member of the department, Mike Matherly (Geography) retired in Spring 2005 and was replaced by Judd Curran in Spring 2006. The long awaited replacement for Shadell, Scott Therkalsen, was hired on a series of 1 year contracts in 2007 and 2008 and became permanently full time in Fall 2009. This finally returned the geography department to its previous full-timing staffing level.

In the early 1990's, Ressler's two long-running field classes (Geology of Nat'l Parks, Geology of CA) were cut by Vice President Daniels who suggested that instead the new "World Wide Web" could be used to conduct "Virtual Field Trips." By 1999 O'Dunn and Dean Bradley pushed for initial funding of a team-taught, interdisciplinary field course ("Natural History of San Diego Region" offered during the Spring bloom) first developed by O'Dunn, Matherly, Cliffe, Jacobson, Goodman, and Joe Henry (Botany). Throughout the first decade of the millennium, the department began expanding its field course offerings through the efforts of Chris Hill, eventually including 4 summer field courses (Eastern Sierra first in Summer 2007 by Curran, Colorado Plateau in Summer 2009 by Hill and Therkalsen, who also taught the Northeastern Volcanic California in Summer 2010, and a California Coast Range yet to be offered), several 1-weekend field courses (Gary's Catalina Island in Fall 2007 and Chris's Eastern Mojave Desert), and restoration of its proper line-item funding. During this time, Gary also developed a distance education course entitled Geology National Parks (first in Spring 2007), and in Fall 2007, Geology 110 went through a name change from "General Geology" to "Planet Earth" to increase enrollment; it was also briefly offered through distance education by adjunct. The GIS Lab begun by Goodman was also updated into a lecture/lab course by Curran that articulates with San Diego State (Spring 2007).

During this time, "Prop R" funding dramatically upgraded campus facilities for many departments, but eliminated the building that housed the Department's dedicated classrooms. Only a new Earth Science laboratory was created in the new science building (Bld #30) in Spring 2007, but unfortunately without a dedicated GIS lab. The following year, Spring 2008, the Earth Science lecture facilities were demolished and classes were moved into inadequate temporary trailers from Fall 2008 through Spring 2010. Unfortunately by this time there were not funds to implement the planned reconstruction of building 36. Working with facilities the department was able to secure reasonable lecture facilities in building 36 while we await the moneys for proper accommodations. We were, however, fortunate to work with facilities in the design and installation of the first 3 of a series geography/geology rock and vegetation specimen gardens that have already proven useful for field course orientations, lab class exercises and faculty professional development purposes (Spring 2012).

Difficult financial times began in 2008 and the state began defunding education causing sections to be cut college wide. These "across the board" cuts continued through the writing of this document having an extremely negative impact on the department. Since 2008 there has been a 18% section reduction within the Earth Science department. As of Fall 2011 all geography adjuncts have been eliminated and it appears the same may be the case for both Oceanography and Geology by Fall 2013. Beyond Spring 2012 the department is at a breaking point at which more cuts will make it impossible for all faculty to maintain a 1.0 full load. Cliffe has met the administration's request for campus-wide instructional flexibility by successfully teaching across disciplines into Geology. Hill has repeatedly met the administrative needs of the campus by increasingly serving in Interim administrative positions away from the Department.

Program Goals

1.2 Appendix 1 contains the most recent 6-year Unit Plan for the program. From the 6-year Unit Plan, select your most successful and least successful goals and answer the following questions:

For your most successful goal:

a) What activities did you undertake to achieve this goal?
b) Report and explain the data you have to verify progress toward your goal.
c) How did the achievement of this goal help move the college forward toward fulfillment of the planning priority goals in its strategic plan?

Most Successful Goal: "Offer Staff Development Field Trips that will explore water issues affecting our community"

After a short intermission, following Mike Matherly's retirement, the Earth Science Department has continued offering staff development trips educating colleagues about water and other environmental issues throughout Southern California. These trips have been attended by faculty from a wide variety of disciplines across the campus. Trips have included the following:

- **Fall 2012: "**National Weather Service Forecast Office for Los Angeles**"**
- Spring 2012: "LA's Faulted Landscape: Oil, Fossils, and Landslides"
- Fall 2011: "Native Oaks of San Diego County"
- Spring 2011: "San Diego's Rivers and Creeks"
- Fall 2010: "Orange County Groundwater"
- Spring 2009: "Hydrodiversity of the Salton Trough"

Evaluation of these trips has taken place through the normal professional development activities evaluation process as well as informally through conversations and anecdotes from numerous people throughout the campus. These trips have helped the college move forward with numerous goals ranging from student success and instructor preparedness to developing community partnerships and responding to community needs. Instructors across disciplines have integrated material from the trips into their curriculum while also developing the off-campus relationships that help the college understand the needs of the community in order to better prepare and place students in the workforce upon graduation.

For your least successful goal:

a) What challenges or obstacles have you encountered?
b) Has this goal changed and why?

Least Successful: Secure appropriate work, office and storage space in the refurbished 300N building as well as three lecture classrooms with a maximum capacity of 55 students *and one geospatial lab conducive to GIS instruction (newly updated)*

Since Earth Science classrooms must be equipped with maps, globes, and/or geologic specimens we require dedicated classrooms meeting certain specifications that allow these essential resources to be on hand. In the past we had three dedicated Earth Science classrooms in the now-demolished 300W building which held 55, 37 and 37 students respectively and shared a computer lab with chemistry for GIS. After it was demolished in Spring 2008, we were provided with completely inadequate replacement lecture space from Fall 2008 through Spring 2010. At that point we were moved to refurbished 300N (building #36 as of fall 2010). Due to lack of funding we were forced to work within the existing building foot print. Although we were able to work with facilities, and they did a great job under very restraining circumstances, as a result of limitations the rooms created (our current classrooms building #36 353, 354, 355) could not be tailored to the required specifications. Also, the floor print of the building did not allow for the recreation of the Earth Science offices and Englehorn Student Success center as recommended in past Program Review documents and 6-year plans. For more information see *SECTION 6.8.* Our primary goal of proper facilities to achieve student success remains unchanged.

Implementation of Past Program Review Recommendations

1.3 Your program **6-year Unit Plan** in **Appendix 1** contains the most recent Academic Program Review Committee recommendations for the program. Describe changes that have been made in the program in response to recommendations from the last review.

The Program Review Committee offers the following recommendations:

1. *Develop a job description for a shared technician with Chemistry and pursue hiring as programs expand.*

Incomplete: This position was approved through the proper channels when the funding dried up and we continue to suffer as a department as a result. We were next on the hiring list as determined by the classified staffing committee just before the hiring freeze (see PRC minutes 11/20/2008). However, our hopes now remain frozen in time like the head of the great Ted Williams. For a detailed explanation of the hiring history and our needs see SECTION 9.3 and Appendix 16.

2. *Restore funding for field classes*

Complete: In Fall 2007 the full transportation budget for Earth Science field courses was restored. As field experiences constitute the application of the knowledge gained in the earth sciences, the restoration of the transportation budget line item allows students the opportunity to develop their practical skills in the observation, measurement, and interpretation of natural phenomena. The budget allows the department to offer a full suite of courses (when FTES goals allow) within an academic year that include two one-unit weekend courses to various areas of geologic interest in Southern California, a cross disciplinary three-unit course on the Natural History of San Diego County, and a three-unit, week-long course to areas outside of southern

California.

3. *Fund the purchase of necessary supplies and technology.*

   Completed and ongoing on a yearly basis.

4. *Continue working with the Facilities Committee to secure appropriate work, office, storage space as well as a large lecture classroom.*

   Not Completed: See Section 6.8

5. *Create a link with an appropriate-level English composition course and Geography 130. Evaluate the level of student success as compared to Geography 130 courses without a link.*

   Completed: A Trial run was completed in fall 2006. The trial was an attempt to increase enrollment and success. Success rates were not improved greatly and course enrollment is no longer an issue. Communication with the linked instructor was also an issue. The link was not continued.

6. *Collaboratively write student-learning outcomes and collectively agree upon their assessment methods to be written in course syllabi. Use student-learning outcome data for continued course and program improvement.*

   Completed: See Section 3

7. *Using the Course History Information Report, continue to submit curriculum modification proposals for those courses that have not been reviewed by the Curriculum Committee in more than four years or curriculum deletion forms for those courses that have not been offered in the last three years.*

   Completed: Currently all of our outdated course outlines are being updated as of Spring 2013. We have developed an "Associate of Science for Transfer Degree" (AS-T) for both Geography and Geology. As of March 2013 the proposed degrees have been approved by the curriculum committee and are in the process of securing board approval.

SECTION 2 - CURRICULUM DEVELOPMENT AND ACADEMIC STANDARDS

In **Appendix 2 - Catalog Descriptions**, insert copies of your catalog descriptions from the most recent college catalog (see "Courses of Instruction" section. This is the blue section). If your program has an Associate Degree program, include the relevant pages from the catalog (see "Associate Degree" section. This is the yellow section). [NOTE: Do not include your actual course outlines]

2.1 Review your courses outlines and explain how these outlines reflect currency in the field and relevance to student needs, as well as current teaching practices.

Course outlines for the department older than 2008 are in the process of being reviewed and updated during the writing of this review.

Problem solving, quantitative reasoning, and knowledge-based critical thinking are reinforced across the department's curriculum. The department makes a conscious effort to explicitly and deliberately link all phenomena and explanation to foundational theory. This provides students a basis upon which to evaluate competing models and assumptions as they are encountered in future endeavors. The hallmark of the department continues to be the stress placed upon college level note taking abilities and, towards that end, our outlines have been updated to include the use of the latest technology at our disposal. Our courses consistently incorporate a reading and writing component through lab exercises, short answer exam questions, exam essays, projects, and papers. Through evaluations and mentoring, the department makes every effort to monitor whether these skills and processes are also being integrated into sections taught by adjunct faculty.

The department long ago established and will continue to evaluate the learning outcomes to be accomplished by students in each course. The department measures this progress in a variety of ways with an emphasis on written exams as a mode of testing higher-level student conceptualization.

2.2 What orientation do you give to new faculty (both full- and part-time) regarding curricular expectations (i.e. SLOs and teaching to course outlines), academic standards, and department practices? How do you maintain an ongoing dialogue regarding these areas? **You are encouraged to use feedback from your Faculty Survey discussion.**

The orientation of our newest full time department member (first as an adjunct and later as a full time instructor) provides a good example of our work; the following are normal procedures within the department. We first provide all the important "on campus" components such as a campus tour, keys, office space, introductions around campus, classroom setup, review of course outlines, etc. Informally, we then usually buy the new faculty member lunch to share the expectations, history and general attitude of the department. Back on campus during flex week all faculty (old and new) are deeply involved in department planning ranging from the writing of SLO's and schedules to evaluations of past semesters grades. All new faculty members are strongly encouraged to attend their scheduled course as it is taught by another more experienced instructor in order to gather ideas and an understanding of our expectations.

We maintain high standards and a high level of communication thanks in large part to the physical organization of the department. Our "hovel" office space setup is conducive to constant contact between all members of the department. Walking into the office space at any time one is likely to encounter conversations regarding specific course content or evaluation procedures or new classroom technology or potentially something completely unrelated and absurd (see: Mark Goodman). Though old, without this office space or something comparable the communication within the department, and thus effectiveness, would be highly impaired.

2.3 Give some examples of how your department members keep their instruction (i.e. delivery, content, materials, syllabus) current and relevant to student academic and/or career needs.

The Earth Science department is on the cutting edge of instruction content, technology, and relevant career opportunities. We maintain this high standard in many ways. Department members constantly take additional college courses to improve knowledge, currency and/or technology within the disciplines we teach. We also take advantage of flex week opportunities to improve our instruction. This may include on campus workshops or for this department most importantly the professional development field workshops are extremely beneficial. Workshops focusing on Earth Science topics throughout Southern California are constantly integrated into course material greatly improving content with local examples and current "real world" practices. We are also able to understand career opportunities (and make placement contacts) within the Earth Sciences better by attending these workshops. Lastly, we currently have members of the department working in earth science related fields allowing us to provide very specific career advice and help place students directly from our programs.

All of this outside is showcased in the delivery, content, materials, and syllabus of department members. Our syllabi contain the latest updates in our fields and the material we use is often actual real time data gathered minutes before class. The content and delivery of our courses employs the latest relevant techniques ranging from meaningful power point presentations, to a specific online lecture series created by a department member, to earth science game modules created during sabbatical work.

2.4 Analyze the data in **Appendix 3 - Grade Distribution Summary**. Identify and explain any unusual retention patterns or grading variances. (To figure retention percentages, subtract the "W's" from the total enrollment and divide that result by the total enrollment.)

Review of the Grade Distribution Summary Report reveals that the grade distribution of introductory lecture courses (Physical Geography, Human and Cultural Geography, General Geology, and Intro to Oceanography) is roughly bell-shaped, especially in the A-D grade range. However, specifically within the introductory level Earth Science courses, it is not unusual to find that the number of "F" grades equals or exceeds the number of "D" grades. We believe this is due to student's false expectations of the courses and their emphasis on the application of theories and models. Many students tend to erroneously view the earth sciences as less rigorous than biology, chemistry, or physics. For example, anecdotally we have heard many students expect the Physical Geography course to be a simple memorization of maps with a focus on the social rather than the physical side of the field. Similarly many students enter Oceanography expecting to learn about dolphins or where to find the best surf. In general we have found students are largely unprepared for the rigor of Earth Science courses.

Overall the grading patterns in these lecture courses are relatively consistent throughout the program review period. When compared to the college as a whole it appears our grade distribution is consistently lower. We believe this to be the case for two chief reasons. First, as mentioned above, students find their way to the Earth Sciences as a kind of last resort when looking for a way out of taking the introductory level GE physical science course. As a result we begin each semester with a biased pool of students adverse to science in general and in large part unprepared for a college level science course (See Section 4). Secondly, we are concerned that a large part of the Grossmont campus has slipped into presenting courses that are less rigorous than they once were and potentially trending toward remedial instead of college level instruction. Thus, we believe we are inconsistent with the overall grade distribution and success rate of the college as a result of potential grade inflation which may be occurring in some areas of the college. Encountering Earth Science students on a daily basis it is hard for department members to understand the college wide 70% success rate and a grade distribution highly skewed toward the "A" range.

We do see some exceptions to the overall bell-shaped distribution within the Earth Science department with some subjects showing increased success rates and higher grades. This occurs in the more subject-specific 100-level courses such as Meteorology, Geography of California, Intro to Geographic Information Systems, or Earth History, and the 200-level courses such as California Geology and Geology of National Parks. These courses tend to attract students with a more intense interest in the subject and are therefore more motivated to succeed. With the exception of Geology of National Parks, an online course, they also exhibit higher retention rates. These exceptions also occur in lab and field courses primarily due to the hands-on nature of the work and the smaller class sizes, which allow more opportunities for student-instructor interaction. Additionally, field courses most of the time attract more interested and motivated students.

Retention in the Earth Sciences department is slightly lower than the college as a whole (Figure 2a). This slightly lower average likely reflects the more rigorous nature of science courses in general and that the best science students are likely to disproportionately enroll in physical science courses outside of our department. Within the department, the retention rates are relatively consistent during the regular semester. One significant trend we do see is in the decreasing retention within the geography department specifically. This can be understood in tandem with an examination of the increase in withdrawal rates for geography. We believe this to be a result of a focused effort by instructors to force students into face to face meetings with instructors to realistically examine their grades and realistically evaluate their best academic options.

In the past we found some students confused by their failing grades at the close of the semester. In recent semesters geography instructors have made increased efforts to help those students clearly on a path towards failure examine the option of withdrawal (this has been done with messages on failing tests, by singling students out for post class discussions, through email reminders and a variety of other techniques). We believe ultimately it is academically beneficial to those students who are likely to fail to withdraw and retake the course at another time.

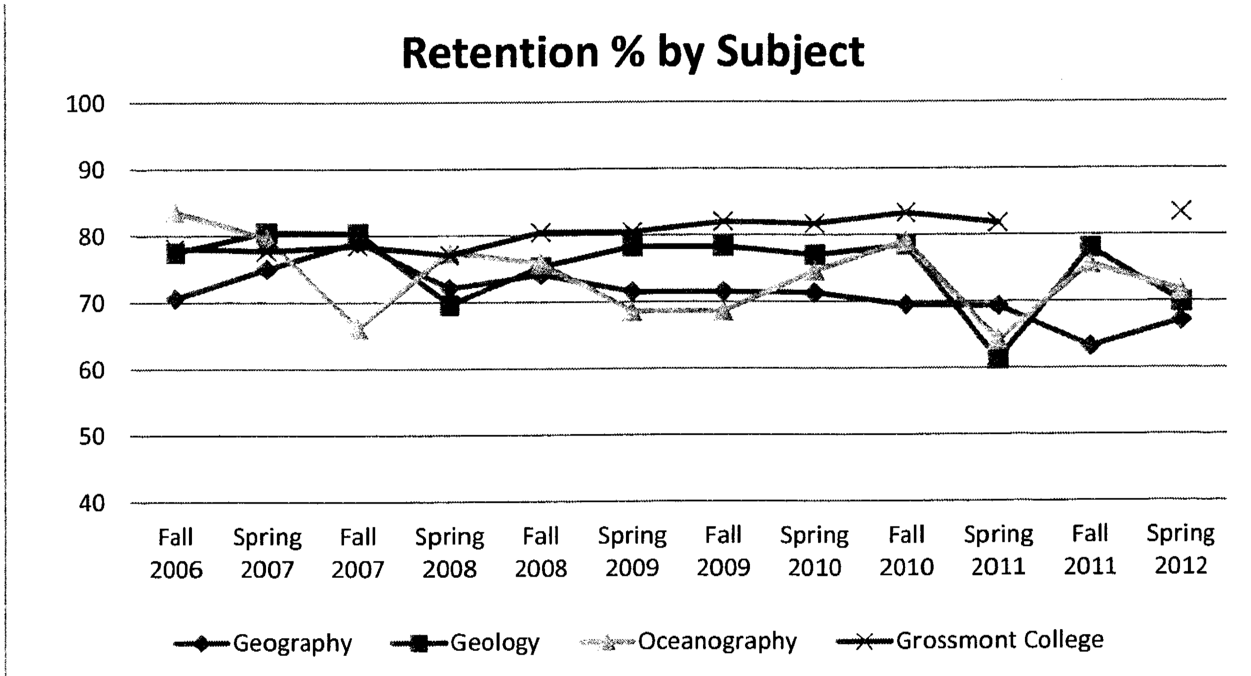

FIGURE 2a

2.5 Describe strategies employed to ensure consistency in grading in multiple section courses and across semesters (e.g., mastery level assessment, writing rubrics, and departmental determination of core areas which must be taught).

The department relies on strong intradepartmental communication amongst both full-time and adjunct faculty to assure that consistency and standards are maintained across multiple-section courses. Grade distribution reports are reviewed regularly and appropriate recommendations are made to the faculty member(s) whose grade distributions appear to be outside the department standard.

The discussion of core concepts, presentation techniques, course organization and management, assessment techniques/results, lecture tools, etc. has always been informally a cornerstone of departmental dialogue and introspection. With the implementation of student learning outcomes into the accreditation process the department now has a formalized document to ensure that this important process continues.

2.6 Describe and give rationale for any new courses or programs you are developing or have developed since the last program review.

Recently the Geography 104 (Intro to GIScience) course curriculum was updated to articulate with the same course offered in the Geography Department at SDSU ("Geography 104"). The modification included changing the course number (from Geog 180 to Geog 104) to be consistent with the course at SDSU. In addition, since a fair portion of the course involved labs and homework in an online format, the course was modified to hybrid course status to include one hour of lecture and two hours of lab. Some of the lab work is completed online using the class website. More emphasis was also placed within the course content on the development of spatial literacy through the use of computers, mathematical algorithms, and spatial statistics to analyze geospatial problems. Consequently, a prerequisite of Math 103 or 110 or equivalent was added to insure that students enrolling in Geography 104 are prepared with the basic skills necessary to be successful in the course. Because of this change, the course was also approved to satisfy Grossmont College GE under area A3.
Currently the Earth Science Department is in the process of "pre-preparing" for a new program and a new course with the hope of being "shovel ready" for implementation if and when funding allows. The future growth of this important highly employable program is largely tied to the decision to provide the Earth Science department with the same resources every other science department on campus has: a technician. As the GIS program expands it will be impossible to maintain the necessary technology without a dedicated GeoScience Technician.

Tied to the growth of the GIS program we are also working on the development of a Water Science and Geospatial Technology suite of courses, starting with development of a second-semester GIS course, and potentially culminating with development of an entire A.S. program or emphasis within the existing Earth Science program. The anticipated goal is to (1) produce a hydrography-directed Water Science program, partly in direct cooperation with the United States Geological Survey's California Water Science Center and its local network of stream gaging stations, nested groundwater observation wells, in-stream water quality sensors, and access to hydrographic and satellite transmission equipment (with potential linkage to summer internships in the Western United States), and (2) taking into account Mark Goodman's recent sabbatical leave research relative to current Federal and State budgetary uncertainties, widen the topical focus to include Geospatial Technologies such as GIS.

GIS is identified as one of the top growth industries affecting future job creation by the Department of Labor's Employment and Training Administration. The proposed Water Science and Geospatial Technology Program would enhance the training of students in GIS by providing a new layer of application-oriented GIS coursework directed toward current employment trends within the Earth Sciences, in addition to a general focus upon applications across the Water Industry, such as in technical careers within the United States Geologic Survey and other public water management agencies and private sector positions. The department learned about the need for training in hydrography, before the general collapse of the economy, by direct communication with the USGS as a result of the close ties developed with that agency. Two current instructors are employees (Cliffe/Curran) of the USGS, as are a steady stream of former Grossmont Geography students. However, as a result of the downturn in the economy, most agencies that hire hydro techs are not currently in the process of hiring. This fact, in conjunction with continued cuts to classes within the department has meant that the full implementation of the water/GIS program has been put on hold for the moment.

In the future, as funding improves, we are also preparing for an academically-rigorous Cultural Geography Field Course to complement and enhance the Cultural, World Regional, and California Geography courses within the Earth Science Department. Because Social Science students are commonly left without actual lab or field experience with the phenomena they study they miss the opportunity to benefit from actual exposure to real-life settings that powerfully demonstrate the phenomena discussed in these lecture courses. The real world knowledge gained through a cultural field course will better prepare those students who then transfer from our program into upper division coursework in Social Science or Teacher Ed programs at the 4-year institutions. The process of critically thinking and applying classroom knowledge to observed field patterns and problems, especially in disciplines devoid of field and lab opportunities, addresses the College's institutional goals of providing Exceptional Learning Environments, including to historically underserved populations. This course will innovatively integrate several full-time Geography instructors into one course using Southern California's cultural landscape as the main classroom. The rationale for producing a Cultural Geography Field Class is based on (1) our department's success in producing a rewarding and academically credible natural science field program, (2) our department's recent hiring of a second Cultural Geographer (Therkalsen joins Goodman), (3) the expertise by our other two Geographers (Cliffe and Curran) in California Geography, and (4) our location in one of the most dynamic cultural regions in America. The Southern California cultural landscape provides an unparalleled classroom in terms of demographic transformation, foreign immigration relative to American foreign policy, ethnic and language enclaves, religious expression, border and migration-related policies and challenges, water infrastructure, land-use policies and change, military-related economies and contagion, urban and transportation innovation, and much more. Furthermore, the post-911 educational world is a world where cultural knowledge beyond pop-culture now matters. In-field lectures will require extensive student note taking. In-field assignments will link data (e.g., U.S. Census data), theoretical models (e.g., Population Pyramids and Demographic Transition Model), and written hypotheses (e.g., predictions on migratory push-pull factors) to actual results within the human landscape (e.g., language of written street signs, or type and prominence of religious architecture). The course will culminate in a final exam that will rigorously test student's participation, knowledge, and understanding of course material.

2.7 How are current issues (i.e. environmental, societal, ethical, political, technological) reflected in your curriculum?

"Current issues" are the backbone of our department. Within the Earth Science department the entire curriculum revolves around understanding, interpreting and predicting current real world phenomena. These "current issues" are embedded and fully integrated into all curriculum. For example, within Physical Geography and Meteorology courses a major focus is placed on the working of the atmosphere and understanding real time weather. In order to practice this students are expected to constantly analyze real time atmosphere pressure maps downloaded minutes before class from the National Oceanographic and Atmospheric Association. Meanwhile next door in California Geography an instructor may be referring to an LA Times article referencing the exact water issues covered in class the previous day. At the same time in our last classroom you will probably find Geology students analyzing a stream gage graph in order to predict the current and future groundwater ramifications for San Diego County.

2.8 If applicable, provide a comparison of the retention and success rates of distance learning sections (including hybrid) and face-to-face sections. Is there anything in the data that would prompt your department to make changes? (Please see instructions for help on finding the applicable data.)

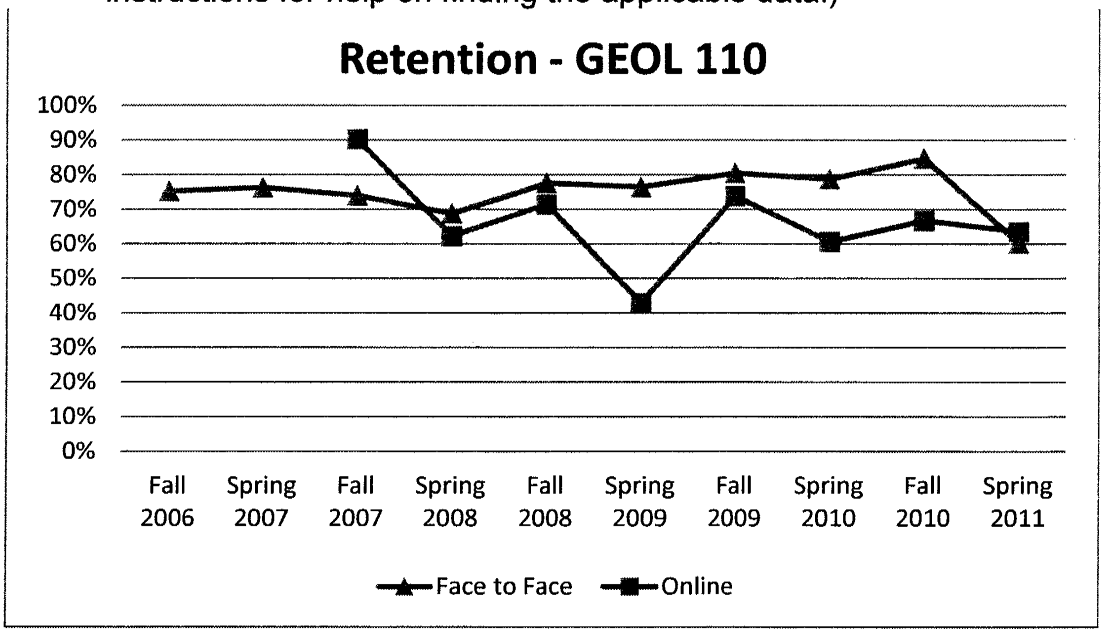

Figure 2b

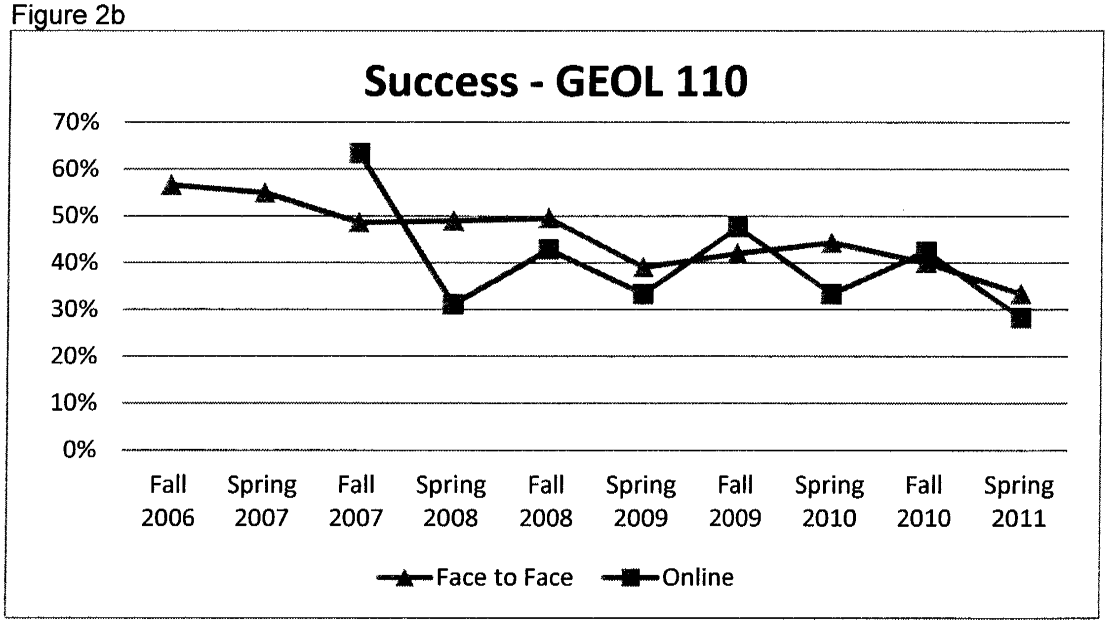

Figure 2c

As seen above (Figures 2b and 2 c) success and retention results in online courses versus face-to-face courses are relatively similar, however, our comparison data is very limited because Geology 110 is the only course offered both online and face-to-face (Geology 220 is our only other online course and it is online only). As expected, and as is common with most online courses, the retention rates are lower. However, the fact that the online retention rates are so similar may indeed point to the possibility that the online portion of this course was actually easier that the face-to-face because typically with online courses we expect to see much lower retention rates. At this point there is no way to evaluate the rigor of this course since it is no longer being taught.

This department maintains strong skepticism towards online courses. From our direct experiences, discussions with others, and recent research and data within academia, we believe online courses in general turn out to be less rigorous, and have lower student success and retention rates than face-to-face lecture courses. Conversely, from experience with the Geology of National Parks course we have also learned it is possible to create an academically demanding online course that maintains the same college level expectations as normal on campus courses however, this is extremely time consuming and difficult to accomplish and thus these courses seem to be the exception to the rule. It is our belief that most online courses do not accomplish the goal of extending the same learning opportunities outside of the classrooms as students are likely to achieve on campus. We thus proceed down the "distance education" road very warily and urge Grossmont College to carefully consider how the future direction of online instruction will influence our reputation as a strong academically grounded campus.

2.9 If applicable, include the list of courses that have been formally articulated with the high schools. Describe any articulation and/or collaboration efforts with K-12 schools. (Contact the Career and Technical Education Partnership and Tech Prep office for help.)

We do not currently have any classes articulated with high schools. However, we are cognizant of, and supportive of, the statewide standards for grades 6-12 as pertain to Earth and Physical Sciences, and use them as a general guide for defining "the floor" upon which our college-level courses are built.

Furthermore, we're very aware of the importance of our local K-12 Districts to the relative success of Grossmont College, and, are very supportive of any assistance that we can provide. For instance, we've participated in the high school Science Decathlon that's held on our college campus, and we've loaned geologic specimens to individual teachers on occasion. But most importantly, we've become fairly active in teacher "professional development" as described in Section 5.7, and in teacher-training by way of two classes developed and required statewide, specifically in preparation for acceptance into University-level teacher-training programs. The first, "World Regional Geography" (GEOG 106), is a return to a traditional region-by-region survey of social systems, cultures, and peoples, spurred on by the post "9/11" realization that Americans were largely oblivious to actual cultural reality "on the ground" spatially across the planet, and, to the fact that they were actually hated in many places in a rather spatial and systematic manner. We typically offer three sections per semester of GEOG 106.

"Earth Science" (GEOL 104) was added for the same type of audience and statewide requirement, and we typically offer one or two sections per semester. Both courses also satisfy G.E. perquisites, and both courses typically fill, but largely because of their niche serving the education community. They are welcome additions to the Earth Science curriculum, held to the same high academic standard as all Earth Science courses.

2.10 Consult with the articulation officer and review both ASSIST.org and the Grossmont College articulation website. Please identify if there are any areas of concern or additional needs your department has about articulation with four-year institutions. Please describe how the program ensures that articulations with key four-year universities are current.

See APPENDIX 17 for our current Geography and Geology articulation with SDSU. SDSU is our primary transfer institution and we work closely with the Grossmont articulation officer while working through the articulation process to ensure we are current and to address any concerns. In addition, the department receives regular updates from the Articulation Officer on our campus regarding the status of articulation of our courses with other universities within the CSU and UC systems, as well as private institutions. The department also works closely with the departments of Geology and Geography at SDSU to ensure that students who plan to transfer to those corresponding programs are completing the correct preparatory coursework and that articulation agreements are current.

Our most recent concerns regard the implementation of the *Transfer Model Curriculum.* We have contacted the SDSU geography department and will continue to communicate as the models are written and implemented. On the Geology side we held discussions in February of 2012 and 2013. We met with the chair, undergraduate advisor and several other members of the SDSU Geology Department to improve the articulation of Grossmont Geology majors transferring to SDSU. We discussed how transferring Geology majors would be affected by the new "transfer" degree. Specifically, Grossmont's Geology major is a better preparation for students transferring to the Geology major at a university than is the transfer degree, yet the state intends to give admission priority to students with the transfer degree. The transfer model curriculum for Geology will be accepted at SDSU, but unfortunately, it will track into the B.A. in Geology rather than the more professionally accepted B.S. Additionally we discussed the possibility that Grossmont's GEOL 150 (Natural History of Southern California) could receive transfer credit at SDSU as GEOL 200 (Scientific Inquiry). The idea was well received at SDSU, so in anticipation of articulating the two courses we have modified the curriculum in GEOL 150 to make it more compatible with GEOL 200.

The most recent update, as of March 2013, is that both the AS-T in Geograph and Geology have been approved by the Grossmont College Curriculum Committee and are going to the board for approval. It should also be noted that while we have completed these new degrees we do intend to continue offering our original A.S. degrees as well.

SECTION 3 - OUTCOME ASSESSMENT

Using the course Student Learning Outcome (SLO) assessment data that you've compiled in **Appendix 4** - Annual Progress Reports, as well as **Appendix 5** – SLO Assessment Analyses and **Appendix 6** – Course-to-Program SLO Mapping document, answer the following questions:

3.1 What is working well in your current SLO assessment process, and how do you know? What needs improvement and why?

The Earth Science Department was on the leading edge of the student learning outcomes implementation thanks to the leadership of Chris Hill. Chris was involved with the campus wide SLO program and even served on the SLO "Rapid Response Team." Having her in the department made the entire SLO process much smoother as our questions could be answered immediately with the most up-to-date information. Early in the process we established the practice of meeting and working on SLO's during each professional development week. At our department wide meetings we worked together to formulate program level SLO's and then broke down into individual departments to write specific course level SLO's. Completing the process in this way allowed us to include part time faculty as well as all full time faculty and allowed us to work through the SLO process in a timely manner. After the writing of SLO's was complete we continued our meetings during flex weeks to 1.) Assess the past semesters assigned SLO's (as designated by the department's six year SLO plan) and 2.) Coordinate as a group the current semester's SLO plan. Throughout the semester we also informally discuss the assessment taking place within our specific courses.

The only area of the SLO process that could be improved is availability of access to the SLO 6 year plan. The department has already addressed this issue by posting the plan in the common area for all to reference.

3.2 Using your course-level **SLO Assessment Analyses** (**Appendix 5**), this is part of your annual reporting process, and your **Course-to-Program SLO Mapping Document** (**Appendix 6**), discuss your students' success at meeting your Program SLOs.

Our program level SLOs are written in such a way that each program SLO is covered and assessed in almost every course. There are some that do not correspond to specific course instruction and SLOs but this is mainly in Geography due to the fact that it is a wide ranging discipline covering both the fields of "social" science and the "hard" sciences as well as technical instruction. As a result some of the program level SLOs are applicable to only one subfield or the other. Other than the anomalies within Geography our course-to-program mapping document is working as intended.

As we assess our individual course SLOs we have found that students have struggled with some of the program level SLOs. As indicated in past assessment analysis and discovered both through the formal SLO assessment instruments as well as informally through discussions with students, we believe the main reason for the lower levels of student success remains a lack of preparation. Especially within the Earth Sciences we often discover students find their way to our courses by choosing what they perceive as the "easy way out" of the college science requirement. We do believe we would see much higher levels of success program wide if there were minimal requirements for entry into college level courses.

3.3 Based on your discussion in **Section 3.2**, are there any program SLOs that are not adequately being assessed by your course-level SLOs? If so, please indicate by clearly designated modifications to your **Course-to-Program SLO Mapping** document in **Appendix 6**. Please discuss any planned modifications (i.e. curricular or other) to the program itself as a result of these various assessment analyses.

At this time the department is pleased with the mapping of course to program SLOs.

SECTION 4 - STUDENT ACCESS

4.1 How does facility availability affect access to your program?

Our facilities concerns are highlighted throughout this document. Specifically, the current classrooms we have ended up in have a number of student access issues (although it should be noted that the facilities crew has done a superb job under the constraining circumstances). We currently have the "Goldilocks" room setup, one room that is too large, one room that is too small and one room that is just the right size (but not the right shape). The major access issues are with the small room. The tiny size of the classroom does not allow for maneuverability of instructors or students. Chairs (instead of the full desks which increase Earth Science student success) are crammed into a tiny space forcing any students in wheel chairs to remain at the very back of the classroom. For any of those students forced to sit at the back of the small "galley" style classroom viewing the small whiteboard, maps and projector screen can also be problematic often forcing students to stand up or jump around to see the bottom of the board/screen/map.

The current classrooms also produce scheduling conflicts. Without 3 adequately sized classrooms (as indicated in the Earth Science facilities request Section 6.8) we have problems accommodating all potential earth science students. As a result of the necessity to have specimens and maps on hand our classes can't float to other areas of the campus thus during "primetime" slots we are often forced to schedule a large class (50 max) in a small classroom (40 max). Continued over time this significantly limits access to a large number of students. Scheduling conflicts frequently occur with our GIS course as well because we currently have no dedicated geospatial lab. Instead we share a workspace with chemistry which makes scheduling, lecturing and tutoring difficult to accomplish. Without a dedicated classroom in the future it will be impossible to grow the increasingly important GIS program at the college.

Many Earth Science students often have a difficult time accessing instructors during office hours because of the location of our office space. Once they do find our offices the environment is wonderfully conducive to learning but having the same office space recreated in a more accessible location near our classrooms would provide access to more students (especially those in wheel chairs who have a hard time weaving their way around campus trying to find a way down the slope to our current office space).

Another student access concern involves the climate control capability of the rooms. Because of the set-up the temperature is not able to be controlled by the instructors. Therefore, those students who may be adverse to arctic climates or "Bikram" style learning environments may not feel welcomed on certain days in certain classrooms.

4.2 Discuss what your program has done to address any availability concerns (i.e. alternative delivery methods, alternative scheduling sessions, off-site offerings).

The Earth Sciences department makes every attempt to facilitate student success and meet student needs by making maximum use of facilities on campus such as the Disabled Student Programs and Services office, the English Writing Center, and the Math Study Center. We have worked closely with a great facilities crew to create the most accessible learning environment within the limited framework we were provided (this has included moving projector screens, smart carts, whiteboards, and more). Some specific classroom examples of increasing access include: providing ample space for sign language interpreters and providing step-by-step in class lab exercises that replicate field experiences for students unable to participate in certain exercises due to physical constraints. We have also employed other general strategies to increase access including maintaining web sites that offer online resources, developing exercises and activities that give students the opportunity to demonstrate competency in ways other than on exams and offering summer and spring bonus sections.

4.3 Based on your analysis of the Student Survey results in **Appendix 7**, what trends did you observe that might affect student access (i.e., course offerings, communication, department and course resources)?

The survey confirmed some suspicions we had. First the majority of our students (70.2%) enroll in the Earth Sciences to satisfy a general education requirement. As indicated in past student surveys we are also happy to report that once students are "forced" to enroll in one earth science course 35% of our students then take another course by choice. We feel this is especially telling because after taking one course students have a full understanding of the high expectations of Earth Science courses, thus to then have them choose one of our "hard" courses over other options across campus points to the effectiveness of the department. Unfortunately, the student surveys also indicated that the department is not nearly as effective as it could be as a result of the facilities available to the department. An alarming number of students responded in the affirmative with a variety of complaints when asked which "classroom characteristics have reduced your ability to learn the subject." *(See question 14)*

4.4 What implications do these findings from 4.3 have for your program?

As indicated throughout this survey our most pressing concern remains a lack of adequate instructional facilities.

4.5 Based on your analysis of questions 3 through 16 in the **Appendix 7 -** Student Survey, identify any changes or improvements you are planning to make in curriculum or instruction.

Results from the survey indicate that students are increasingly looking to the internet to supplement classroom resources. In order to meet this demand in a productive way department members have created their own websites and video tutorials to allow students easy access to correct and meaningful information that coincides with the proper course material.

4.6 Discuss program strategies and/or activities that have been, can be, or will be used to promote/publicize the courses/program. Comment on the effectiveness of these strategies in light of the results of the Student Survey (**Appendix 7**)

These days our common strategy is to list the course in the course catalog. Doing this has led to nearly 100% fill rates in the recent past. In the more distant past when classes were not filling we did have to promote some courses. We've done so by making announcements in our classes about other open earth science sections or future Earth Science courses as well as maintaining an email list to disseminate announcements to interested students. We have added descriptive advertisements within the course schedule and changed the name of some courses to make them more appealing. We also have ongoing "advertisements" campus wide through our normal program activities. For example, our Geography lab can often be seen working and running around across the campus and we are often asked to explain the class to interested students. We also make our class concepts visible on campus through displays in display cases and through the department participation in campus activities (e.g., 50th anniversary GPS scavenger hunt, science decathlon, professional development activities, etc.). However, our best way of advertising continues to be word of mouth. A large percentage of our students enroll because they were recommended to the course by a friend or because they themselves have taken a past earth sciences course.

4.7 Explain the rationale for offering course sections that are historically under-enrolled. Discuss any strategies that were used to increase enrollment.

Although enrollment is rarely a problem today, historically our under enrolled courses tend to be those that are especially important and required for our majors and it continues to be important to offer them on a regular basis to provide adequate access. In addition we often find students enrolled who have taken other entry level Earth Science courses and desire to take more (with or without becoming a major). We also find students from across the campus enrolled in these courses as a result of the promotion techniques outlined above.

Historically, our GIS course was also frequently under enrolled, however, recently we've seen increased demand illustrating the need to offer it each semester (as opposed to the Spring only offering now). Increased enrollment in this course can be traced to the recent curriculum change making it align with the intro level GIS course at SDSU. Demand for GIS within the workplace has also increased the number of students enrolled as an enhancement to their skill set when seeking employment as well as those attending sponsored by their current employers.

4.8 Based on an analysis and a review of your 6-year Unit Plan **(Appendix 1)**, what specific strategies were utilized to address access issues of special populations (e.g. ethnicity, age, and gender)?

The Earth Science department employed specific strategies to address access issues within our 6-year plan. For example, to increase access we have started offering a national parks geology course online and our 6-year plan also proposes developing an additional geology course online (GEOL 230). In addition we have also utilized the online environment through class webpages with concept explanations, online video lectures and blackboard based practice exams (as indicated in the 6 year plan).

Unfortunately, the 2 components of our 6-year unit plan that would most increase student access have not been achieved. We have not been able to hire a part time Earth Science lab technician and this has decreased individual instructor availability due to additional lab duties that require us to be out of the office unavailable to students. Without a lab technician the hours that the lab room is open, outside of regular class times, for students to study and work using the required materials is more limited. We have also not yet secured "appropriate work, office, and storage space" as indicated in the 6-year plan and as was recommended during our last program review cycle. As noted above our lack luster facilities greatly impact student accessibility.

SECTION 5 - STUDENT SUCCESS

5.1 Building on your answer to question 4.8, what specific strategies were utilized to maximize success issues of special populations (e.g. ethnicity, age, and gender)?

In addition to the information presented above we employ many specific strategies to increase success amongst various special populations. Some of these strategies include: an increased presence online (in terms of instructor accessibility and also availability of assignments and materials), specific personal requests to meet for one on one consultations with at risk students, and increasing the range of applicability of course material (through the use of more diverse ethnic and gender examples). The department has also led the way in outreach to female students in the STEM fields. Specifically, Jenny Duncan has participated in past "BE WISE" programs, the goal of which is stated as the following:

""BE WISE engages young women in science, technology, engineering and math (STEM) learning experiences in collaboration with the region's research, industry and academic institutions. BE WISE goals are to: (1) Stimulate young women's interest in STEM through interactions with professionals, (2) Increase participants' opportunities and knowledge of STEM fields of study, (3) Develop a community of young women (grades 7 – 12) engaged in learning about science and engineering through out-of-school activities, (4) Sustain interest and involvement through alumnae programs and opportunities for women in science at all levels"

We have also been active outside of the Grossmont community by participating in events like the Expand Your Horizons Network" held at USD. The goal of this program is stated as follows:

"Our mission is to encourage young women to pursue science, technology, engineering and mathematics (STEM) careers. Through Expanding Your Horizons (EYH) Network programs, we provide STEM role models and hands-on activities for middle and high school girls. Our ultimate goal is to motivate girls to become innovative and creative thinkers ready to meet 21st Century challenges."

In terms of actual community college-to-Earth Science career, where A.S. degrees certainly form a minority of positions, Tim Cliffe has recently mentored a number of students into career positions with the USGS's "Student Career Employment Program," most recently integrating a female student and a Hispanic male student into an otherwise all-male, white Field Office of the CA Water Science Center. Additionally, Tim has raised a daughter who, after taking a few classes at Grossmont as a high school student, is now (Spring 2013) currently enrolled at UC Berkeley as an Earth Science student, in part by way of the positive role-modeling provided by Tim, Judd Curran, and Mark Goodman. In fact, approximately half of the Grossmont students sent to SDSU in Geography are female, including one of Tim's former students who was concurrently named Undergraduate <u>and</u> Graduate Student of the Year in the <u>same</u> year, and for which he was invited to attend the ceremony.

5.2 Describe specific examples of departmental or individual efforts, including instructional innovations and/or special projects aimed at encouraging students to become actively engaged in the learning process inside and outside of the formal classroom.

Keeping students actively engaged both within and outside of the classroom is a staple of the department. See the following brief examples for each department member followed by a more detailed explanation of some of the work Tim Cliffe has done.

Scott Therkalsen: World Regional and Cultural Geography - Current topic assignments- a series of homework assignments that link real world, real time news items to the current corresponding theories discussed in lecture.
Gary Jacobson: Geology/Oceanography – computer exercises (created on the very first Macintosh computer) driving students to implement theoretical lecture framework in a module learning environment as well as within creative game settings. He also,

provides online practice tests with feedback through blackboard.
Judd Curran: Physical Geography - adopted diagrams and animations from a recently completed weather forecasting certificate program for use in real time weather forecasting in the classroom including integration of comet modules from attendance at the National Center for Atmospheric Research (NCAR).
Mark Goodman: World Regional Geography and Cultural Geography – in the process of creating a workbook integrated with the lectures, so that students have diagrams and space to analyze and annotate the illustrations, diagrams, and maps presented in lecture.
Chris Hill - incorporated MasterGeology into the Planet Earth class. The online system allowed students to view animations (and other visual aids) and answer questions as part of weekly assignments designed to help the students better prepare for classes.
Tim Cliffe: <u>(1) Physical Geography, Meteorology, and Geology Lecture Classes</u> – Has developed a series of Camtasia-produced and edited video-lectures (*27 10-minute videos as of early Spring 2013, and growing systematically*) posted to the website Vimeo (*upon suggestion by Jeff Lehman while on Flex Field Trips*) in order to enhance assigned textbook readings and to better prepare the motivated student for enhanced classroom engagement and exam performance (*as well as being now-utilized by former GC students enrolled in 500-level Regional Climatology at SDSU for the purpose of directed-review of foundational topics*). Has also sought to improve the quality of student writing on exams in these science classes by handing out the essay question two weeks in advance, along with a full page of guided sub-questions (*for improving content*) and guided directives (*for improving mechanics and explanatory focus*), then developing a collection of past successful student essays for students to peruse during Office Hours. Though somewhat less-challenging than what might be expected at the University's to which these classes matriculate, the results have been dramatic for the dedicated student (*including those few who <u>do</u> take advantage of instructor Office Hours*), even as grading has been tightened commensurate to heightened expectations. <u>(2) Physical Geography Lab</u> – Has completely redirected the lab class from a pre-2005 emphasis upon descriptive tedium (*devoid of the Scientific Method, devoid of the explanatory emphasis stressed in the Lecture, reliant upon workbook-driven "fill-in" exercises, and taught mostly by now-retired adjunct who were "grandfathered" to teach the lab but un-credentialed to teach the Lecture*) into a class driven by hypothesis testing, collection of actual data, usage of Internet-available real-time spatially-extensive data (especially from the National Weather Service), usage of the Coastal Sage Scrub resources that exist in an almost uniquely-accessible manner at Grossmont College, all purposefully integrated in a manner to enhance Lecture performance, and finally, focused upon teaching students to read an actual landscape, skyscape, and ecosystem rather than a mass-produced workbook. Tim followed the lead of Mike Matherly, who had become involved in lab reform as he neared retirement and had begun to instrument the lab with compass, GPS, and local USGS Topo Maps. Tim added clinometers, thermal IR sensors, heat lamp equipment, real time weather maps in tandem with onsite weather observations, extensive use of both the Biology Dept.'s Coastal Sage Scrub Preserve and other campus slopes in more xeric conditions, the Biology Dept.'s Native Plant Garden for disabled students, and, actual hand-held specimen from the Geology Dept.'s rock and mineral collection. Simultaneously, he has

written an integrated series of labs that weaves fundamental topics across successive lab sessions, is organized explicitly in the context of the Scientific Method, is focused upon enhanced writing and computational requirements, and is ultimately tied to enhancing topics covered in lecture. Judd Curran has leant an amazing amount of effort in training faculty and keeping up with physical changes on campus and in developing a system for tracking our expensive GPS equipment. As the process continues, Tim has most-recently worked with Michael Golden in Biology, and under the leadership of Tim Flood and a team of outstanding professionals from Gafcon and KTU-Architects and the California Native Plant Association, to build a series of San Diego County themed "native ecosystems" on campus (*the initial three now approved by the Board, and built immediately east of the LRC*), and along with Gary Jacobson picked out each specific rock added to these gardens, all of which for use as lab-usable landscaping. The most understated success was the inclusion of a patio space designed exactly to replicate the leaf of *Quercus agrifolia*, with innovative glasswork included to replicate oak trichomes along the veins, and winding benches for students to sit upon while relaxing in the Quad. While lack of a lab tech has continued to make this enhancement process very work-intensive for Geography faculty, the lab program is now entirely staffed by full-time Geographers producing an amazing product vs. the pathetic status of less than a decade ago. <u>(3) Spring Field Class</u> – Tim has developed a close relationship with SDSU's Santa Margarita River Ecological Reserve (SMER) in Riverside County, starting with the College of Sciences and lead onsite manager Mark VanScoy, and now continuing with his replacement Pablo Bryant. The Field Class again uses SMER's North Field Station for its Trip #4 overnight location, for its Saturday Night Review Session, and for its all-day Sunday Final Exam. The site is ideal owing to its indoor warehouse and table space, its outdoor tables used as exam stations, its bathrooms and water and electrical access, and for its outdoor resources used extensively on the exam (*native Coastal Sage Scrub atop the Santa Margarita River Gorge, with Triassic-age Bedford Canyon Formation in contact with Mesozoic-age Plutonics*). Pablo has developed a good relationship with Tim, Mark, and Scott, and has now given us "locked gate" access to the mouth of the Santa Margarita (*which includes USGS infrastructure in addition to outstanding access to rock and sediment exposures, and to native Riparian Habitat*) for Trip #2, and is interested in highlighting <u>our</u> use of this gem of the SDSU Field Station program.

5.3 Explain how the program collaborates with other campus programs (e.g. interdisciplinary course offerings, learning communities, community events, tournaments, competitions, fairs) to enhance student learning inside and outside of the formal classroom.

Informally the Earth Science department is in contact with many other departments socially; we also have developed relationships more formally through committee work and on staff development trips. Building these relationships has allowed us to enhance student learning in a number of ways. We have experimented with a number of learning community courses in past, including links between Geology and English and Geography and English. We also have an interdisciplinary course offering (Natural History of San Diego County) with Biology and the Earth Sciences department.

In addition to the events mentioned above (BE WISE and EYH) we have participated with departments from throughout the sciences in the science decathlon held on campus. We have also been involved whenever on campus community open house events occur. Most recently we organized a series of events revolving around GPS and compass work for our 50th anniversary open house.

5.4 Based on an analysis of "Reports" data (This is found on the intranet under "Reports"), discuss trends in success rates, enrollments and retention, and explain these trends (e.g. campus conditions, department practices). Provide examples of any changes you made to address these trends.

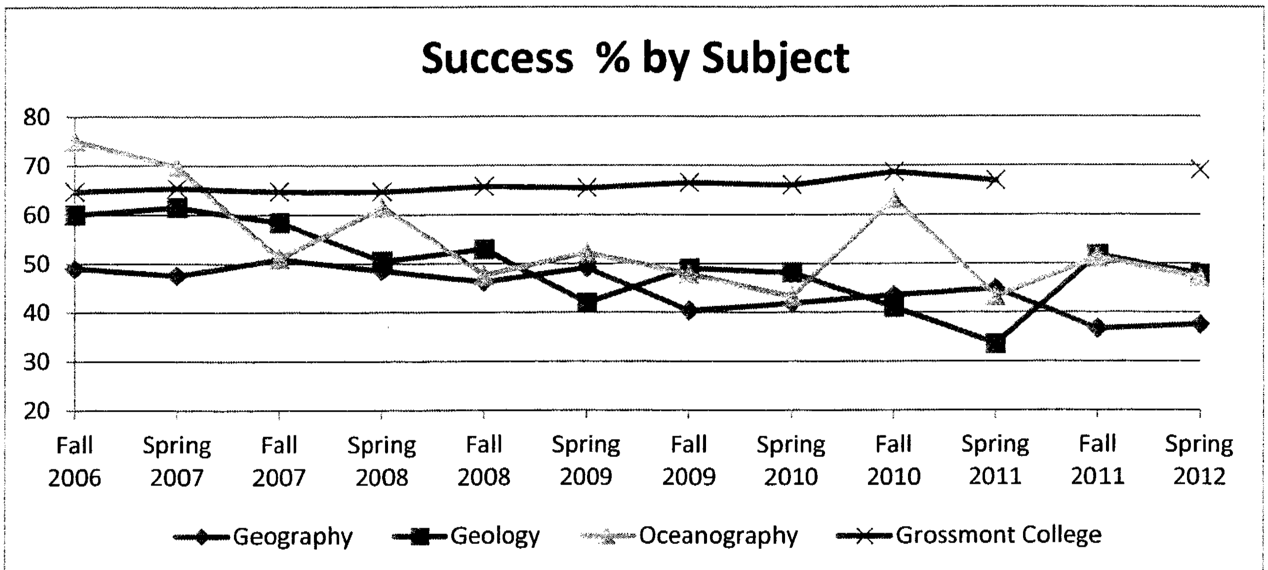

Figure 5a

As seen above (Figure 5a) the overall department success rate is lower than the college wide success rate. We believe a number of factors can account for this. First, as mentioned previously many students arrive unprepared for the rigor of Earth Science courses with their emphasis on the application of theories and models. Many students tend to erroneously view the earth sciences as less rigorous than biology, chemistry, or physics. Those students who find their way to the Earth Sciences as a kind of last resort when looking for a way out of taking the introductory level GE physical science courses tend to perform worse than others. Secondly, we believe our success rates accurately identify those students who complete courses with at least a college level understanding of the subject. It has become quite clear that a large portion of the student population at the college may be unprepared for college and especially for science classes. While we find the 50% success rate somewhat disheartening we can completely understand it, it is however, difficult for us to understand how the same sample pool of students we see in our classes is succeeding at such a high rate across the rest of the campus.

Over the time period above we do see a significant decline in the success rates. This has occurred for a number of reasons. First, over this time period our department has been pared down to almost zero classes being taught by adjuncts. For a number of reasons, we believe in the past some of the classes taught by our adjuncts may not have been holding up to the high standards set by the department. As evidence we see a dramatic spike in success in Fall 2010 Oceanography above; during this semester all oceanography courses were taught by adjuncts. As full time instructors have taken over almost all instruction we've seen a corresponding decrease in success as all classes are now taught with standards that are almost uniformly high. Second, over the same time period we've also seen enrollment greatly increase. This means larger class sizes, less personal interaction and it usually leads to less success.

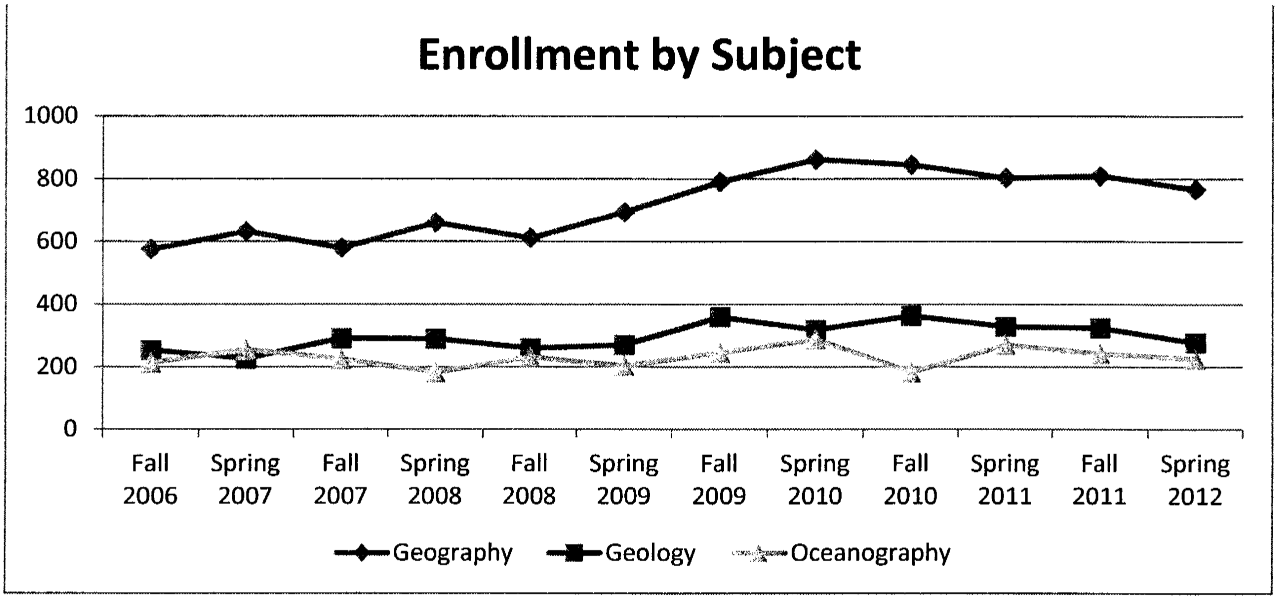

Figure 5b

Probably similar to the rest of the campus, the department has seen an increase in enrollment since 2008. This can be explained by the increase demand for classes as a result of the declining economy. As the entire campus has been jam-packed even our courses that only filled at 70-80% rates in the past have developed waitlists. The increase enrollment from 2008 until 2010 was accomplished by increasing fill rates (efficiency) not increasing the number of courses offered. Thus, we start to see a decline beginning in 2010 when we began slashing full courses and we've seen a steady decline since as a result of a steady decline in course offerings. Average enrollment now stands near the historical department averages (800 for geography and 220 for Oceanography and Geology).

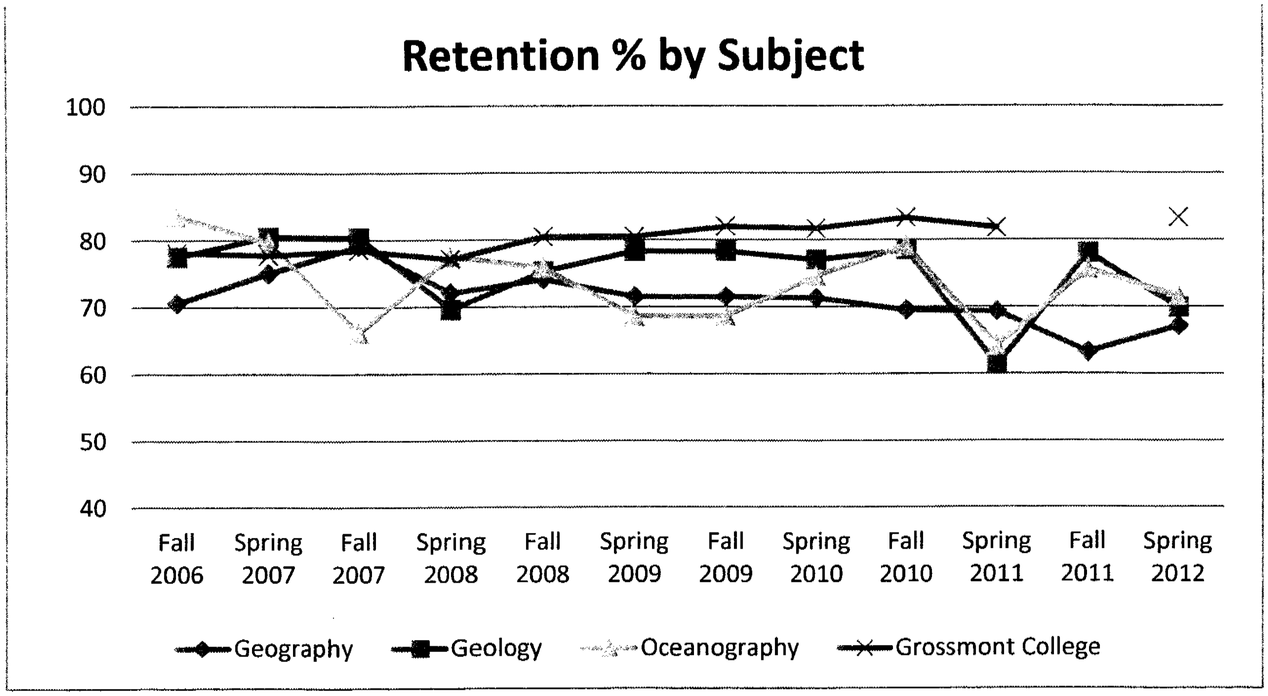

Figure 5c

In the earth science department the retention trend is slightly lower than the college as a whole (Figure 5c). This slightly lower average likely reflects the more rigorous nature of science courses in general and the fact that the best science students disproportionately enroll in science courses outside of our department. Within the department, the retention rates are relatively consistent during the regular semester. One significant trend we do see in is the decreasing retention within the geography department specifically. This can be understood in tandem with an examination of the increase in withdrawal rates for geography. We believe these trends to be a result of a focused effort by instructors to force students to face reality. We've increasingly required face to face after class or in office consultations for at risk students to genuinely examine their grades and evaluate their best academic options. In the past we found some students surprisingly confused by their failing grades at the close of the semester. In recent semesters Geography instructors have made increased efforts to help those students, clearly on a path towards failure, examine the option of withdrawal (this has been done with messages on failing tests, by singling students out for post class discussions, through email reminders and a variety of other techniques). We believe ultimately it is academically beneficial to those students who are likely to fail to withdraw and retake the course at another time. We believe the anomaly seen in Spring 2011 in Geology can be explained by the fact that for the only time in our history we offered 3 online sections (which historically have lower retention rates). While in the same semester in Oceanography a scheduling quirk led to the department offering an abnormal percentage of Oceanography 112 classes in the evening or early morning.

5.5 If state or federal licensing/registration examinations govern the program, please comment on student success.

Gar has not yet received his license to handle a rock hammer yet he continues to press on. Interestingly the comical accidents that occur as a result actually increase student success.

5.6 Referring to **Appendix 8-** Degrees and Certificates if the program offers a degree or certificate in the college catalog, explain the trends regarding number of students who earn these degrees and/or certificates.

As illustrated in appendix 8 our degree count remains very low. Since 2007 we have had 7 geography graduates and 2 geology graduates. These low numbers are expected and anticipated as a result of the career fields within the department. Careers within the Earth Sciences usually require a minimum of a Bachelor's Degree thus most students do not focus on obtaining an associate degree from Grossmont College. Instead we remain primarily a transfer department and our goals focus on preparing students for this reality.

5.7 Describe activities your faculty has implemented to provide and maintain connections to primary, secondary and post-secondary schools.

As mentioned in Section 2.9, our work with Primary and Secondary schools has been both consistent and largely in the realm of formal teacher "professional development" through the "institute" work of Tim Cliffe.

Over the past <u>seven</u> years, Tim has been a featured speaker at <u>eight</u> "Ground Water Institute for Teachers" across Southern CA, which are action-packed two-day events that include speakers and field trips provided by industry and research leaders, hosted regionally by local water districts, underwritten with teacher stipends directed largely at Junior and Senior High science teachers, organized and run by the American Ground Water Trust (AGWT headquartered in New Hampshire), and co-sponsored nationally by the United States Geological Survey (USGS). (See the AGWT Newsletter in the Appendix 17 that features the 2010 Institute in Oxnard, CA).

Additionally, Tim has taught as the primary discipline-expert for <u>two</u> Summer Institutes for K-12 Earth Science teachers run jointly by UCSD and SEASAND (Science Education Association of San Diego), each held for two weeks at the beautiful campus of Pt. Loma Nazarene College, and with teacher stipends and credit offered through UCSD. The first, offered in 2006 as a Geology Institute paved the way for a Meteorology Institute in 2008. Both were explicitly standards based (CA Dept. of Education), and, both had Tim teamed up with an experienced high school Earth Science teacher and an experienced Middle School Earth Science teacher.

Both venues have allowed direct relationships and experiences to be forged with K-12 teachers, have produced other one-day field trips and presentations, and provided intimate familiarity with state K-12 Earth and Physical Science standards not commonly considered at the University level.

We also focus our attention in the post-secondary arena by maintaining connections with our primary transfer institution SDSU. We do so both formally and informally. As many of us are SDSU alumni we maintain relationships with colleagues across the I-8 and we often meet through alumni BBQ's as well as instructor development workshops (for example, the 2009 SDSU Geotech Conference) and intercampus meetings. We also have formal relationships established to articulate courses and provide students with orientations to bridge the gap from Grossmont to SDSU.

Statewide we also maintain connections with other departments through our involvement in professional organizations and activities. Through our participation on educational field trips offered by different campuses and professional organizations like the San Diego Geological Society we are able to make connections as well as improve our own course offering. Or geographer's involvement in the California Geographical Society takes us around the state annually for conferences reconnecting us with other Geography Departments.

SECTION 6 - STUDENT SUPPORT AND CAMPUS RESOURCES

6.1 Indicate how the program utilizes college support services (i.e. Learning and Technology Resources Center; learning assistance centers for English reading and writing, math, technology mall, and tutoring center; Instructional Media Services, CATL).

The Earth Science Department makes full use of the support services offered throughout the campus. Most members have a referral statement in their syllabus allowing students to access the LTRC and make full use of the computer resources there to complete assigned online activities and access additional information on instructor web pages. We also work closely with the tutoring center whenever possible to employ Earth Science tutors whose availability is announced in class and posted throughout the appropriate classrooms. We have also worked with the math center in the past to share resources and we often refer students to the center or appropriate campus math workshops for help outside of the classroom. In classes where papers are required students are strongly encouraged to seek guidance from the English writing center on campus. A constant theme throughout our courses is the recommendation to students to seek help early and often from the available resources on campus.

6.2 Analyze the results of the **Student Survey** - **Appendix 7** and describe student utilization and satisfaction with campus resources **as it relates to your program** (i.e. availability, usage, relevance).

Although campus resources are readily available to students and instructors often strongly encourage students to take advantage of these resources it appears many options are not being utilized as well as they could be. However, students do indicate that they are happy with the availability of resources (with the exception of counseling where a lack of staffing appears to be a major emerging problem). Apparently, either students may suffer from a lack of knowledge about the benefits of using the campus wide resources or else they may simply not be spending time outside of class on campus.

6.3 Describe some of the activities for which your department has used the Institutional Research Office or other data sources.

The Earth Science department utilizes the institutional research office for annual program review updates, student success studies and of course we have relied heavily on the "Program Review Warehouse" to complete this study.

6.4 Working with your library liaison, evaluate and provide a summary of the current status of library resources (i.e. books, periodicals, video, and databases) related to the program.

The main resource for our Earth Sciences classes is the reserve book shelf. Most, if not all, of our courses have the required text available for 3 hour interlibrary loan. For Geography we also rely heavily upon the numerous atlases provided at the library. Geology students utilize the limited loan desk to check out geologic specimens for study outside of lab hours – a necessity due to a lack of lab technician. Currently there are sufficient book resources to accommodate the limited number of research papers required throughout the department. Our liaison, Nadra Farina-Hess, has done a great job making us aware of new potential resources she can order as well as periodically reminding us of what is currently on hand and the media liaison, Roxane BenVau, has kept us up to date with the advances in the technological side. For example, while typing this statement I received this communication:

Hello, Geography faculty!

I wanted to let you know that one of the library's streaming video databases has added some additional clips in the Geography area. Here is one of those clips: Fire and Ice

You can easily explore other Geography clips by clicking on the link to Intelecom. Select **Geography** from **Academic Discipline** in the left-hand column and then click on the **title of a clip** in the right-hand column. Scroll down a bit to see the description of the clip and the Play, URL, and Embed buttons.

Any of these clips can be put into Blackboard for student viewing. See the "How to Link Clips in Blackboard" handout.

Feel free to contact me if you have any questions or comments!

Roxane

Roxane BenVau
Instruction Librarian & Asst. Professor
Faculty contact for media, copyright & e-reserves
Grossmont College
roxane.benvau@gcccd.edu
(619) 644-7553

6.5 How does the program work with the various student support services (i.e. Counseling, EOPS, DSPS) to help students gain access to courses, develop student education plans, make career decisions and improve academic success? How does your program communicate specific and current information that can be used by those student service groups?

In addition to maintaining the very helpful informal relationships with the counseling department we have, in the past, made specific presentations to ensure counselors are informed of the courses we offer. We are usually the first line of student questioning when the question of Earth Science major and career arises. The department provides students with initial answers and recommendations and then recommends those students speak with a counselor to formulate an educational plan to meet their goal. This recommendation may often include walking the student to the counseling office or at least calling to make sure the two parties are on the same page. We are also in constant contact with EOPS and DSPS. Through email and direct interactions we facilitate student test taking and any other necessary accommodations to ensure student success.

6.6 Describe how the department uses available technology to enhance teaching and learning and to communicate with students? According to the **Student Survey** in **Appendix 7**, how do students respond to the use of technology?

Our use of technology to increase student success often starts before students even set foot into the classroom. Many of us make use of the contact information provided on webadvisor to send out a mass email to future students preparing them for the class (this may include the syllabus, recommended books to purchase, recommendations of concepts to review, etc.). We then continue this trend throughout the semester utilizing instructor webpages (which are often updated with new information on a weekly basis) and additional out of class technology based assignments (e.g. Vimeo lectures, online reading assignments, other specific online exercises). The department is excessively accessible via email often responding to students within moments into the early hours of the morning. Most importantly from a student viewpoint, most of the department now posts grade online in real time so that students have constant up to date access and are always aware of where they stand in our courses.

6.7 Identify and explain additional technological resources that could further enhance student learning.

Improving the primary focus of our courses, the lecture component, is the focus of our technological needs. Thus, we could greatly benefit from a better projector in our lab classroom (30-208) as well as a new generation document camera for the same room. Our physical geography and meteorology lectures would also benefit from the availability of a "map wall." Such a wall, as seen on other campuses (e.g. Penn State University) allows for real time data visualization. Specifically a wall would consist of multiple computer monitors displaying different weather data. This allows for the integration of the cause/effect type relationships between the various components of the atmosphere in real time.

Access to a specified GeoScience computer lab is also rapidly becoming an issue. The geology, oceanography and geography labs have computer elements that currently requires students to move from the lab setting to a nearby campus computer room. As these computer labs are technically not "reseravable" we operate in a gray zone working with the chemistry department (the number one user of the computer lab) to secure space when possible. This set up is not ideal for student success and it often creates software and other technical problems. As Earth Science lab students increase in numbers and the required computer exercises campus wide increases it is becoming increasingly difficult to secure the required number of available and properly programed computers for our students. As demand for GIS employees and our GIS program grows in the future it is also imperative to secure a dedicated GIS computer classroom. The Earth Science Department now requires a specific GeoScience computer classroom,

Student learning would be further enhanced by the availability of a data collection platform or "data logger." Such a devise can be taken into (or left) in the field to gather real time data. Such a device digitizes analog measurements for transfer to computers for data manipulation and analysis. Eventually, the device will be the brains of our a larger planned data collection network used for field courses, GIS, geography labs as well as the future-planned hydrotechnology program. We also would like to have a vertical seismograph in addition to our current horizontal one for presentations to Geology students and the public.

6.8 Comment on the adequacy of facilities that your department uses. (e.g., does the room size and configuration suit the teaching strategies?)

Our facilities are currently inadequate, as highlighted throughout this document. Because we were restrained by the current building blueprint we were unable to design classrooms with our own specifications. Thus we ended up with one class that is too large (room max of 75 while our course max is 50) and one that is too small (room max of 40). Because of the size of the large room certain portions of the whiteboard are difficult to read from certain parts of the room; this is a particularly important problem for our department because of the stress we place on note taking utilizing the whiteboard. This large room can also leave the class with an "empty" or "dying" feeling with large barren areas of the room especially as the classes thin out. Fortunately, we were able to make some adjustments to this room including installing a stage, moving a smartcart and providing large tables to enhance student note taking.

Unfortunately, the other two rooms do not have a raised area for lecture and it becomes nearly impossible for all students to see all portions of the whiteboards, especially in the small "galley" classroom. The size of these other rooms also prohibits the large desks we require, instead they have terrible tiny (like 10"x12" barely large enough for a notebook) chair/tables which are for some unexplainable reason covered in bumps. In addition the climate controls in these classrooms do not function properly and the lighting arrangement is not the best design to accommodate our needs. Facilities has done their best to work with us to address as many issues as possible but currently our classrooms are our greatest hindrance to student success. In class lecture is the primary component of our programs (as opposed to group work or student presentations or online work) and this is why we have been placing adequate lecture facilities at the top of every planning list for the past decade. Unfortunately, we have been unsuccessful thus far (even though, astonishingly, this was a primary recommendation from our last program review).

SECTION 7 - COMMUNITY OUTREACH AND RESPONSE

7.1 How does your program interact with the community (locally, statewide and/or nationally)? Describe activities.

Our program has a unique skill set that is beneficially locally, statewide and on a national scale. On campus our department is present for most community outreach events. For example, we were highly visible (documented in several publications) during the 50th anniversary celebration offering both a GPS exploration of the campus and a compass traverse. Locally, off campus, we also use our geographic knowledge. For instance department members have taken an active role in urban planning and neighborhood community development activities. Specifically, Judd Curran serves on the Greater Golden Hill Community Development Corporation and Scott Therkalsen serves on the Ocean Beach Planning Board. Tim Cliffe has served for the last twenty years as a host in La Mesa for several nights each Spring at the Interfaith Shelter Network, providing meals, showers, bus tokens, lodging, and compassion to homeless job-seekers. Mark Goodman has also used his geographic knowledge of Native Plants to assist his community in vegetative planning. Statewide the department interacts with the community through field studies with professional organization, such as the California Geographical Society, as well as Grossmont College flex trips. Tim Cliffe also leads some of these community outreach events and lectures through his work with the United States Geological Survey. Our reach even extends nationally through Mark Goodman's work with an historical preservation non-profit organization in Oklahoma. Tim and Mark have also lent time and support to Renee Tuller and previously to Joe Henry in their work with various student Veteran Groups (most notably the SVO), and have forged a trust and dialogue with Counseling that has enhanced Veteran motivation relative to the responsibilities they bear under the modern G.I. Bill.

Advisory Committee Recommendation

Some disciplines are required to have advisory committees. Answer this question if this is applicable to your program. In **Appendix 9**, please list the organizations represented on the Advisory Committee and include samples of the meeting minutes.

7.2 If appropriate, summarize the principal recommendations of the program advisory committee since the last program review. Describe how the program has responded to these recommendations. Include the date of last meeting and frequency of meetings. List organizations represented.

N/A

SECTION 8 - FACULTY/STAFF PROFESSIONAL DEVELOPMENT

8.1 Highlight how your program's participation in professional development activities including sabbaticals (listed in **Appendix 10**) has resulted in improvement in curriculum, instruction, and currency in the field.

Our department has led the way in planning meaningful professional development activities both on and off the Grossmont College Campus. Mark Goodman and Judd Curran have been involved in the planning process as members and chairs of the faculty professional development committee. Mark Goodman and Tim Cliffe have also planned a number of off campus faculty professional development trips that are applicable to faculty campus wide and specifically used in Earth Science courses. For example, past trips throughout Southern California focusing on the issue of water (e.g. San Diego Rivers, local water districts, etc.) have been immediately integrated into Physical Geography, Geology and Oceanography courses. Other trips focusing on resource issues (e.g. oil in Long Beach, economics of the Salton Sea, etc.) have been integrated into Cultural Geography and California Geography courses and much of the information gathered has been instrumental in planning our culminating 4 weekend Earth Science field course. Our sabbaticals have been used to improve curriculum, enhance currency in our fields and improve our current courses. For Example, Mark Goodman's recent sabbatical researched a proposed new Earth Science program combining hydrology and geographic information systems.

Department members also regularly engage in professional development activities in their free time. For instance, within this cycle most department members have completed some type of traveling field work. Internationally for example, members have visited England to explore the historical development of the fields of Geography and Geology as well as many other regions to gain firsthand experience along with applicable visual aids to engage students in Physical, Cultural and World Regional Geography. Closer to home members have also traveled extensively throughout California gaining critical knowledge for California Geography. Department members also remain active engaged in coursework through community workshops and college credit classes. For instance, multiple members have completed coursework leading to a certificate in online education. In addition members have taken courses at Grossmont and other institutions around the nation.

One of the recent limiting factors in the field of professional development has been the discontinuation of travel funding for conferences. Although some department members still travel to statewide conferences financial assistance would potentially increase attendance at theses professional development activities.

8.2 Describe any innovative professional development activities your program has created.

As noted above, members of our department are responsible for planning the most innovative professional development activities on campus. Through these traveling activities we not only improve regional understanding, providing applicable knowledge to faculty members, but the trips also foster opportunities for long term interactions with faculty from across the campus. Recent Professional development trips have included:

- Fall 2012: "National Weather Service Forecast Office for Los Angeles"
- Spring 2012: "LA's Faulted Landscape: Oil, Fossils, and Landslides"
- Fall 2011: "Native Oaks of San Diego County"
- Spring 2011: "San Diego's Rivers and Creeks"
- Fall 2010: "Orange County Groundwater"
- Spring 2009: "Hydrodiversity of the Salton Trough"

In addition to these off campus activities department members have produced a number of professional development presentations. Gary Jacobson presented a workshop on 3D Modeling, Animation and Application Development and Mark Goodman has presented workshops illustrating the role of cultural geography in understanding the world (e.g. the ergonomics of bananas). Chris Hill has also participated in a number of workshops during flex week focusing on Student Learning Outcomes and other important campus wide initiatives.

8.3 Describe how your faculty shapes the direction of the college and/or the discipline (e.g., writing grants, serving on college/district committees and task forces, Academic Senate representation, presenting at conferences, etc.).

The Earth Science Department is heavily involved in shaping the direction of the campus both formally, by serving in numerous capacities, as well as informally. All members of the department have served as a representative to the Academic Senate at some point during this cycle of program review. In addition our involvement on campus committees is probably disproportionately larger than the size of our department. Chris Hill leads the way in our campus service as illustrated by her extensive list of service below:

- Academic Senate President
- Curriculum Committee Co-Chair
- Districtwide Executive Council District Strategic Planning & Budget Council
- District Coordinating Educational Council
- Planning and Resources Council
- Curriculum Committee member
- Accreditation Steering Committee
- Organized the Integrated Planning Task Force
- Facilitated development of the initial college Basic Skills plan.
- Authored and edited key sections of the college strategic plan and accreditation follow-up reports
- Co-chaired college steering committee and accreditation writing teams
- Co-chaired the Institutional Excellence Task Force
- Facilitated the reworking of the academic and student services program review processes

- Managed implementation of TracDat data management system for institutional planning and effectiveness
- Co-chaired the Basic Skills Initiative Task Force and directed the Basic Skills Initiative college self-assessment.
- Participant on task forces working on program creation and supervised tutoring

Inspired by Chris, the rest of the department combines to try to keep up by serving in the following ways:

- Faculty Professional Development (2 members)
- College wide Professional Development (2 members)
- Accreditation Standard team 3D
- Dean hiring committee
- Physics hiring committee
- Geography hiring committee
- Taskforce for facilities planning
- American Federation of Teachers Executive Council
- Campus Native Landscaping committee
- Event leader Science Decathlon (3 members)
- Faculty Hiring committee
- Student Disciplinary Hearing committee
- Environmental Scan document team

Perhaps most importantly, Mark Goodman and Tim Cliffe serve on the Grossmont College "Chain Gang." Without their spatial awareness the Griffins football team may not be as successful finding the goal line.

SECTION 9 - STAFFING TRENDS AND DECISION-MAKING

From the data provided (include the data source), please fill in the table below:

	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010
# of FT faculty	5	5	5	4	5	5	5	5
# of PT faculty	5	7	12	9	10	7	5	7
Total Full Time FTEF	4.549	3.349	2.299	3.79	3.347	4.3	4.667	3.5
Total Part Time FTEF	1.2	2.4	3.2	2.65	3.1	2.45	1.9	1.9
Total FTEF	7.05	7.45	6.75	7.1	6.967	7.117	6.767	5.95
Total WSCH	3870	3630	3171	3111	3230	3266	4119	4137

Utilizing the data in the table **and the results of your Faculty Survey discussion**, answer the following questions:

9.1 Explain any observed trends in terms of faculty staffing and describe changes that have occurred (i.e. accreditation issues, expertise in the discipline, enrollment trends).

Our number of part time faculty has fluctuated greatly because of a combination of factors. Our classes taught by full time faculty have increased and decreased each semester over the review period as a result of 1) an additional full timer being hired 2) large changes in department release time and/or 3) members taking advantage of banked leave or sabbatical programs. Throughout the period we have hovered around 2-3 total part time FTEF with slight changes each semester due to the reasons mentioned above. Near the end of the chart above we also see a decrease in total FTEF, part time FTEF and full time FTEF as a result of the recent budget situation and spending cuts. Currently the Earth Science department is relying upon 1.47 release time in order to meet our full time load obligations. If we did not have this release time we would be very close to being unable to fulfill our 1.0 LED for all full time instructors even with the complete elimination of adjuncts. The continued cutting of the Earth Science department approaching and potentially below a department wide full time load remains a major concern and we have expressed this to the College. We have also attempted to explain the intricacies of the department LED; for example, because of the LED breakdown of certain courses a simple 6.0 LED will not fulfill the requirements for 6 full time faculty members.

9.2 Discuss part-time vs. full-time ratios and issues surrounding the availability of part-time instructors.

As is the unfortunate norm across campus, the Earth Science department in the past fell woefully short of meeting the state mandated 75% full time 25% part time ratio. More recently we have been one of the only departments to approach or meet that required ratio. This has occurred for two reasons. First, we were fortunate to hire 2 new full time Geography instructors (both of chili pepper status) during the program review period. This has restored the Geography discipline to the historic average of four full time instructors. In addition to this, for the past couple years the department has been cutting courses and unfortunately most of those were taught by our adjuncts. As of now there are no adjunct Geography instructors and only two adjunct instructors working in either Oceanography or Geology. These circumstances have greatly improved our full time to part time ratio while decreasing the diversity and stability of the department as well as making life difficult for our reliable long term adjuncts.

Historically, the most difficult part time staffing issue for the Earth Science Department has been keeping the good adjuncts we find. As a result of Grossmont College's embarrassing part time pay scale as well as the Colleges physical location, qualified adjunct instructors are much more likely to take an assignment in other districts throughout the county when a conflict occurs. This presents a big problem for the department; in order to successfully teach courses integrated into the department, in terms of rigor and philosophy, extensive training is often required. This is especially true for the Earth Science Laboratory courses. Unfortunately, it is common to have a full time instructor devote much time to training a part timer only to then have the part timer quickly move on when a better opportunity (which almost any opportunity is) is presented.

9.3 List and describe the duties of classified staff, work study and student workers who are directly responsible to the program. Include a discussion of any trends in terms of classified staffing and describe changes that have occurred (i.e. duties, adequate coverage, funding issues).

The department tutors and teaching assistants have become invaluable assets to the department. Tutoring responsibilities include specific one on one explanation and note review sessions, group tutoring sessions as well more general comprehensive guidance on study methods and note taking. Teaching assistant responsibilities in the department include the normal grading of exams and quizzes, duplicating assistance, and assistance in field course preparation and decompression.

We have found it much more helpful to employ tutors within the department under our own guidance rather than working through the tutoring center for a number of reasons. First, the tutoring center is limited in terms of availability, pre-scheduling requirements and total weekly tutoring time allowable per student. Next, it is very difficult to find qualified Earth Science tutors who are ready to tutor without some guidance. Having tutoring occur within the department allows for real time training and help for tutors on the most difficult issues. Lastly, the real limitation for Earth Sciences tutoring occurs because of the specialized materials that the disciplines demand. The tutoring center can't possibly maintain the supplies needed in a common tutoring session. These supplies include, but are not limited to, standard globes, full sets of rock samples, GPS devices, compasses, topographic maps, plant specimens, and Gary Jacobson's self-creation illustrating tidal fluctuation. Students also have access to work under the supervision of the tutor to complete the online modules available on the department computer when the tutoring occurs with the department. Department tutoring has greatly improved student success (for those students who take advantage) and it is for that reason that we continue to request that tutoring monies be made a permanent funding line item for the department.

Unfortunately, while money has become available to improve student success through tutoring, students continue to suffer as a result of the Earth Science inability to hire a GeoScience Technician. Even though the last program reviewers, in all their wisdom, recommended that we get funding to hire a technician we have so far been unable to do so. We were next on the hiring list as determined by the classified staffing committee just before the hiring freeze (see PRC minutes 11/20/2008), however, things have not progressed since then. In the future as the Geographic Information Science program expands and the Geology and Oceanography labs incorporate more and more computer exercises it will become even more imperative that we secure a technician to ensure equipment and programs are maintained. We remain the only science department on campus without a technician and it is really beginning to limit our student's success. For more information see the document below submitted in an attempt to secure release time for faculty members to accomplish technician duties:

Justification for the Earth Science Lab Technician

The department of Earth Sciences is the only science department without a lab technician. For the last 15 years, we have placed the position high on our list of department goals, yet despite the inclusion of the need in past program review documents (see the attached section from the 2005 department program review), the recommendations of two Program Review Committees, and the position's approval by the Planning and Resources Council (P&RC), the position remains unstaffed due to insufficient funding. Although allocations of discretionary release time to lab coordinators have helped somewhat in the last two years, the 20% release time granted falls well short of the required 50% position recommended by the Classified Staffing Committee (see the attached minutes from P&RC, November 2008). This situation, which is both inequitable with respect to working conditions and pedagogically sub-optimal, has existed since the department's beginnings and now, after <u>50 years of accumulated neglect</u>, a *critical threshold has been reached which threatens our educational services.*

The following is a summary of the changes which have taken place in the Earth Sciences which justify the critical need to hire an Earth Science Lab Technician:

- Years ago (20+), there were fewer earth science labs and they were mostly map/paper/pencil type labs for which there was little need for a tech. For labs which involved rock and mineral specimens, we had an informal agreement that chemistry and physics techs would help us curate the specimens but frankly, they provided limited help because they lacked the necessary training in the earth sciences. About the only thing they were able to help with is painting numbers on specimens, and that was only when they did not have any immediate responsibilities to their respective departments. Nowadays the chemistry and physics techs are pretty much always busy, so we have given up asking for their help.

- Over the years, the department has acquired (through donations, purchases, and field collection) an increasingly huge collection of rocks, minerals, fossils, and maps which now require far more time to curate and maintain.
- About ten years ago, our department began moving away from pen and pencil labs towards more pedagogically engaging, hands-on labs involving data collection and analysis. Such labs rely on settling up and maintaining equipment (something that lab technicians do in other departments). Furthermore, every time we get a new adjunct instructor, a full time instructor must train the adjunct in the proper set-up, use and maintenance of the lab equipment.
- Beginning in the spring of 2001 we began offering field courses with an increasing emphasis on using technology to collect and analyze field data. Our field component has grown markedly in both the number of sections offered and the amount of equipment required (GPS receivers, thermal infrared sensors, YSI salinity/dissolved oxygen/ temperature probes, sampling devices, compasses, refractometers, 2m FM radios, etc.). Our field classes are far more academically engaging now, but we are finding it difficult to keep up with equipment maintenance and set-up issues.
- With the increasing amount of technical equipment being used in the lab and field courses, we are experiencing an ever greater need for someone to oversee the checkout of equipment.
- Starting in the fall of 2003, our department began offering Oceanography labs with much the same equipment set-up/tear down/maintenance issues as our other labs and field courses.
- The completion of the new science building included a weather station and seismograph, the monitoring and maintenance of which places additional demands on instructor time.
- The debris of 50 years of accumulated neglect is beginning to seriously affect our efficiency.

Some of the duties of the Earth Science Lab Technician are thoroughly detailed in attached matrix. Nearly all of these duties require formal training in the earth sciences and therefore cannot be performed by intermittent hourly workers.

For matrix of duties see appendix 16

9.4 How are decisions made within your program? What role do part-time faculty and/or classified staff play in the department decision-making process?

Decisions are generally discussed in impromptu “rap” sessions. As a result of the unique and beneficial floor plan of our department offices the 6 of us are in constant contact with one another. When an issue arises it generally is discussed amongst Earth Science Instructors individually or in a small group settings and then when the opportunity arises and the department is all in the building at the same time a department discussion and decision will occur. If immediate action is needed the department may have an official department meeting. Recently, as more department wide input is required we have arranged a schedule of bi-weekly department meetings. Whenever decisions require or involve adjunct faculty we are in contact via telephone or email with them. In addition to these times during the semesters, most of the big decisions are made during faculty professional development week on campus when we hold our department meetings. This allows us to ensure full time and part time department members have a chance to provide input.

SECTION 10 - FISCAL PROFILE AND EFFICIENCY

Refer to **Appendix 11 – Grossmont WSCH Analysis** for efficiency. **Appendix 3** has the sections and enrollment. **Appendix 15 – Fiscal Data: Outcomes Profile** also has enrollment information.

10.1 Analyze and explain any trends in enrollment, numbers of sections offered, average class size and efficiency.

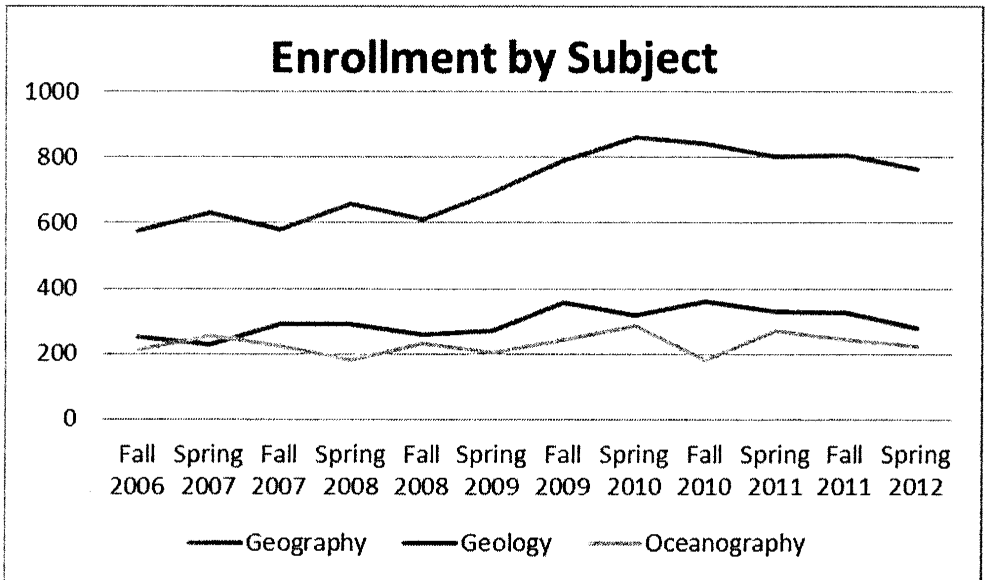

Figure 10a

The trends seen over the program review time period can be explained in large part by analyzing the state budget circumstances. In terms of enrollment and sections offered our department, like most of Grossmont College, was growing in 2006 and 2007. During this time period we were able to offer many sections increasing access to many students. This also allowed us to improve individual contact with students through the teaching of classes which were not enrolled at the maximum capacity. Starting with the financial crises in 2008 and continuing through 2012 the repeated devastating funding cuts to education by the State of California impacted the department. During this time period we saw a continued increase in enrollment as those recently unemployed along with those seeking a competitive advantage enrolled in community colleges. Unfortunately, during this same time period, due to funding constraints, our section offerings have been greatly reduced. This has had two major impacts. First, we have had to limit access to students as a result of limiting the variety of times we offer courses as well as well as having to turn students away from classes enrolled over the course max. Thus, while our class size and thus efficiency have gone up, it has not necessarily translated to increased student success. Most recently, near the end of the program review cycle we have seen our efficiency max out and as sections, which are now full, continue to be cut we have experienced a decrease in enrollment numbers in all disciplines within the department.

10.2 Analyze the Earned WSCH/FTEF data in **Appendix 11-** Grossmont WSCH Analysis. Explain trends for your overall program and for specific courses over a five-year period.

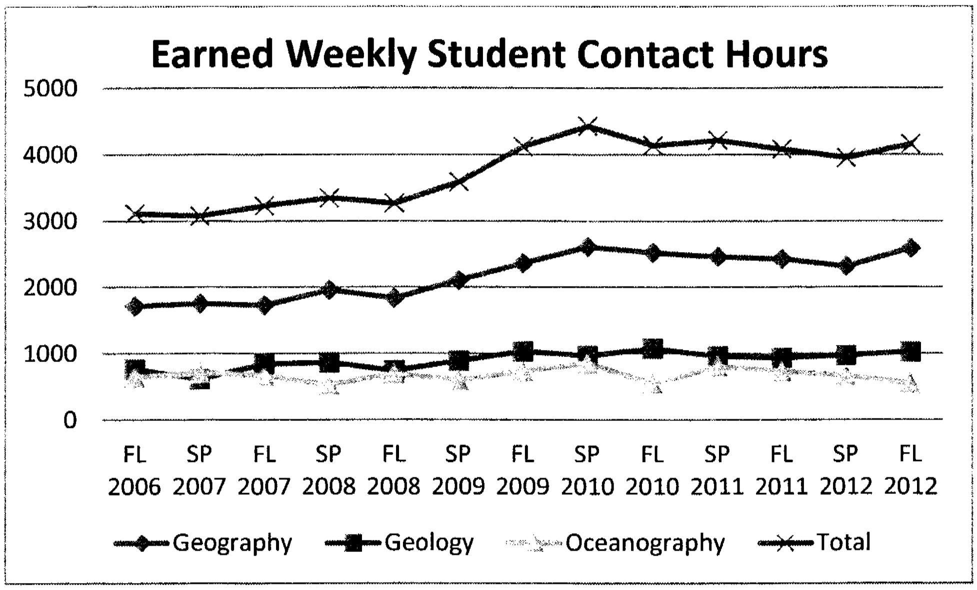

Figure 10b

As a general rule our WSCH/FTEF, or efficiency ratio, has increased throughout the program review period. This has occurred because of a number of factors. First, we have experienced an increase in enrollment, this combined with the fact that we have been cutting sections means that students have fewer options and each section we run is packed. As is the case across campus, for the past few semesters all of our courses have been full with students on the waitlist and this has caused our "efficiency" to spike. Before this general run on courses campus wide we had experienced, most notably, increased enrollment specifically in our GE courses however; the norm of the day is a high WSCH/FTEF department wide.

10.3 Using **Appendix 14** - Fiscal Year FTES Analysis by Program Report and **Appendix 15** - Fiscal Data: Outcomes Profile, analyze and explain the cost per FTES of the program in relation to the earned WSCH per FTEF.

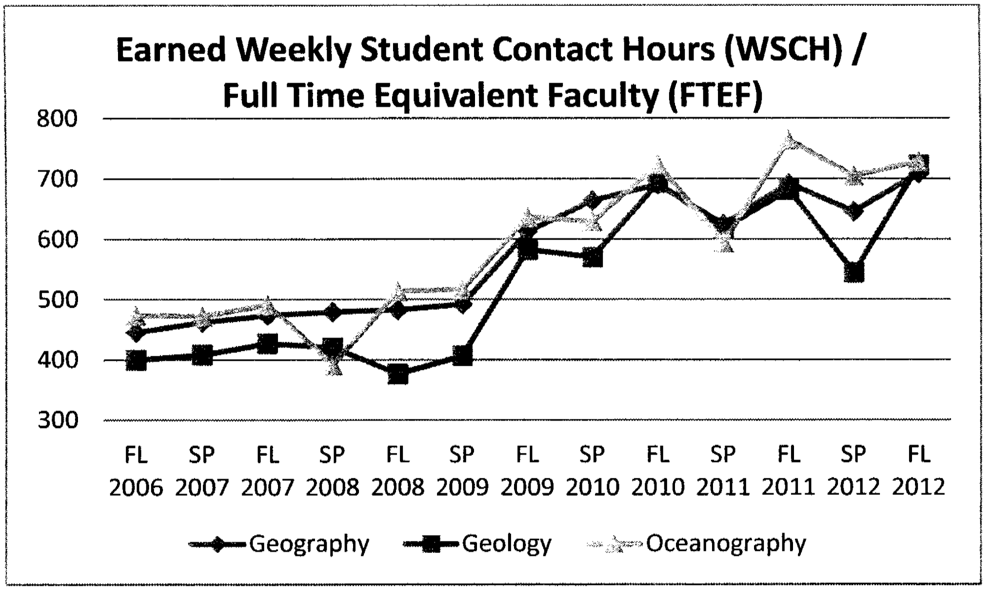

Figure 10c

The Earth Science Department continues to be a money maker for the college overall. For example, for the most recent data available (Fall 2010-Spring 2011) the department unrestricted general fund costs were $695,198 and the total revenue for the department was $1,270,710. Over the review period each discipline within the department also secured revenues exceeding what it costs to run the disciplines individually. Total program costs for Oceanography and Geology have decreased recently as Chris Hill has moved into more campus leadership roles leading to one, a decreased selection of course offerings and two, more courses being taught by adjunct instructors at a lower pay rate. Geography has seen total costs increase as a result of the hiring of a new full time faculty member in 2007. Even with Geography's increase the Earth Science Department is in the green and it is our hope that in the future some of the funds we generate for the college find their way back to the department through the hiring of a Geoscience Technician.

Over the review period we have also seen some other consistent trends across disciplines. First, we have experienced increases in enrollment, WSCH and FTES across the board. Our efficiency (WSCH/FTEF) has also gone up over the review period as we've had to cut sections and adjunct faculty and continue to pack students into the limited number of course offerings we have. The one dramatic outlier seen in 08/09 is a result of back pay owed due to a colossal District error under V.P. of Personnel Lastimado. The VP was subsequently relieved of duties.

10.4 If your program has received any financial support or subsidy outside of the college budget process, list the amount of any outside resources and how they are being used.

The department received a grant from ASGC to purchase new GPS devices and a grant from Google for Google Earth Pro licenses (valued at $11,000).

SECTION 11 – SUMMARY AND RECOMMENDATIONS

11.1 Summarize program strengths and weaknesses in terms of:

- teaching and learning
- student access and success
- implementing and executing the department's vision and mission statement
- fiscal stability

The Earth Sciences department continues to maintain a long-standing tradition of academic excellence that values hard work and academic integrity. The Department provides outstanding, transfer-level, lecture-based instruction to its students, who overwhelmingly intend to transfer to a four-year university. Our success in these areas is possible because of a shared commitment to high standards, meaningful curricula, maximum student contact, intradepartmental harmony, and enthusiasm for our respective disciplines.

Faculty members in the department continue to develop and maintain innovative methods of instruction to ensure increased access and success for all students. With a high number of students taking multiple courses throughout the department we are also able to concentrate our efforts on those students who are especially dedicated and interested, often times helping to directly place them into employment opportunities.

The Earth Science faculty also have an impact beyond their department, working closely with colleagues from across campus, students and faculty from local K-12 programs, government agencies, and the associated departments at area universities to promote collegiality and maintain community contacts.

The department remains a strong net-revenue producer for the GCCCD. It teaches many students, using relatively few resources. As such, it helps subsidize many of the important, yet more-costly, technical departments on campus. We remain proud of our fiscal role within the college. During this review alone the program was a net revenue producer of $2,281,212. We look forward to the college reinvesting some of these funds back into the department in the future so that we are able to continue to operate at a high level.

Our major weakness today is facilities related as outlined throughout this document. Our number one goal as a department remains focused on student success both in the classroom and outside. With our primary means of instruction being lecture we believe one of the most important components of teaching and learning is the educational environment. As of now our educational environment (lecture classrooms) is substandard for our needs (as outlined throughout this document) and we remain concerned that this is having a negative impact on student success (see student survey results Appendix 7 question 14). Outside of the classroom our current office space provides an adequate setting to focus on student success however the constant threat of losing this valuable space without suitable replacement weighs on us heavily.

Our other weakness is in the field of classified staffing. We remain the only Science department to operate without a technician. We are concerned because valuable instructor time is spent setting up labs, repairing broken thermometers, painting numbers on samples, etc. The time spent in these areas directly conflicts with our goal of maximizing student contact in order to increase success rates. The lack of technician has also limited our ability to progress with our GIS program.

11.2 Describe any concerns that have affected or that you anticipate affecting the program before the next review cycle. These may include items such as increases or decreases in number of full-time and adjunct faculty, sections offered, and growth or decline of the program.

Our major concern remains the financial stability of the state and district. As a small department we have been especially hard hit by the past 4 years of budget cuts. Moving forward we are concerned that any additional faculty or section cuts will have significant consequences on our ability to successfully function as a department and serve students. Past cuts have already impacted us in ways mentioned throughout this report. The direst consequences for this department include the lack of funding to provide adequate classified staffing and tutoring, the loss of entire courses through the slashing of sections, the ongoing threat to our field program, the complete loss of all adjunct instructors who have dedicated years to the department, and the potential to be cut below the necessary full time department load. As of this writing the department hangs on the edge of 6.0 LED for 6 full time faculty. In recent semesters the department has helped balance out section cuts by securing release time by serving the campus in other areas. However, in the future when all members return to teaching full time we will be precariously close to not having adequate classes to accommodate 6 full time faculty. This situation has occurred in the past forcing Mark Goodman to teach one of his classes at Cuyumacca College. As further cuts are needed moving forward we stress the importance of not cutting the Earth Sciences sections below 6.0 LED, even while department faculty has release time elsewhere, because of the difficulty of "growing" back to 6.0 LED when all members return to the classroom.

We are also concerned about the fiscal recovery. As the college starts to add sections back in, we strongly favor prioritizing transferable college level courses over "across the board" additions. We are concerned the latter strategy will negatively impact students across campus as well as hindering our students' ability to get the classes needed for transfer.

11.3 Make a rank-ordered list of program recommendations. These recommendations should be clearly based on the information included in Sections 1 through 11 of this document. You may include recommendations that do not require additional fiscal resources.

1. Work with the college to be in on the ground level of planning to secure specifically designed lecture facilities, a dedicated Geospatial lab, office space, field studies staging area, and Englehorn Student Success Center.
2. Secure at least a permanent part-time or shared lab technician position for the department.
3. Maintain and secure line item funding for tutoring monies.

4. Create an "Applied Earth Science, GIScience, and Hydroscience" offering a variety of 1 unit application courses (e.g., GIS applied to Surface Water, GIS applied to Ground Water, Field Instrumentation, etc.).
5. Continue to secure presidential discretionary reassigned time to complete the lab technician's duties until a proper lab tech can be hired.
6. Maintain the current Earth Sciences office building, owing to its unique usefulness, until an adequate recreation can be secured.

APPENDIX 1: SIX-YEAR UNIT PLAN

Six-Year Department/Unit Plan

Department/Unit Name Earth Science Month/Year 11/09

Instructions:

This Six-Year Unit Plan details the goals that you have for your department/unit in a number of areas, as well as the strategies that you plan to implement to achieve those goals. Each year, this plan will inform and be implemented through the activities in your various annual action plans. In addition, this plan is organized so that the work eventually accomplished in the areas listed can be used to complete key sections of your next program review document.

Please fill out all portions as completely as possible. Some units in student and administrative services will need to indicate where the sections do not apply.

THE DEADLINE FOR SUBMITTING THIS COMPLETED SIX-YEAR DEPARTMENT/UNIT PLAN TO YOUR DEAN IS FRIDAY, NOVEMBER 6th, 2009.

Remember, for your Six-Year Plan, you are developing your department/unit goals and strategies (activities) for each of the areas listed as plan sections on the following pages. Your goals and activities may support one or more of the following College Strategic Planning Priority Goals that are provided here for your reference:

Student Access
- **Goal 1:** Better serve students in historically under-served populations
- **Goal 2:** Respond to changing community needs

Learning and Student Success
- **Goal 3:** Provide an Exceptional Learning Environment to Promote Student Success
- **Goal 4:** Promote Student Success for Historically Under-served Populations
- **Goal 5:** Promote Student Success for Historically Under-prepared Populations

Robust Fiscal and Physical Resources
- **Goal 6:** Promote Institutional Effectiveness
- **Goal 7:** Develop and maintain an exceptional learning environment
- **Goal 8:** Maximize Revenue from Traditional and Non-Traditional Sources

Economic and Community Development
- **Goal 9:** Enhance Workforce Preparedness
- **Goal 10:** Develop Innovative Partnerships That Meet Long-term Community Needs

Value and Support of Employees
- **Goal 11:** Promote Employee Success

BACKGROUND

A. Please provide a list of your most recent program review recommendations.

1. Develop a job description for a shored technician with Chemisty and pursue hiring as programs expand.
2. Restore funding for field classes.
3. Fund the purchase of necessary supplies and technology.
4. Continue working with the Facilities Committee to secure appropriate work, office, storage space as well as a large lecture classroom.
5. Create a link with an appropriate-level English composition course and Geography 130. Evaluate the level of student success as compared to Geography 130 courses without a link.

6. Collaboratively write student-learning outcomes and collectively agree upon their assessment methods to be written in course syllabi. Use student-learning outcome data for continued course and program improvement.
7. Using the Course History Information Report, continue to submit curriculum modification proposals for those courses that have not been reviewed by the Curriculum Committee in more than four years or curriculum deletion forms for those courses that have not been offered in the last three years.

B. If applicable, please provide a list of any advisory committee recommendations.
N.A.

C. If applicable, please provide a list of any certification/accreditation recommendations.
N.A.

PLAN SECTIONS

In each section, answer the questions as completely as possible. **Remember that you are discussing long-term plans for the next six years**.

D. Community Outreach/Response

1. What is/are your six-year goal(s) in this area?

   Develop a water science program in conjunction with the USGS and appropriate state and local agencies to train students in the collection and analysis of water data.

   Briefly explain:

   a. why each 6-year plan goal was chosen (include any supporting data)
      Two of our instructors (Tim Cliffe and Judd Curran) have close ties to the USGS and have become aware of the need that the USGS and other agencies have for trained water sciece technicians.

   b. how each 6-year plan goal above supports the college strategic planning priority goals
      This goal supports Economic and Community Development by enhancing workforce preparedness and by developing innovative partnerships that meet long-term community needs.

2. What strategies/activities would you undertake to accomplish each 6-year plan goal?
   Conduct a feasibilty study which identifies the number of students potentially served by such a program and what kind of training those students need.

   Submit new course outline(s) to curricullum committee.

   Offer course(s).

3. How will you demonstrate that you have accomplished each 6-year plan goal (be sure to include how data will be collected/assessed)?
   Students will successfully complete the program.

E. Student Success and Support

1. What is/are your six-year goal(s) in this area?
   Develop Blackboard-based practice exams with feedback.

   Briefly explain:

   a. why each 6-year plan goal was chosen (include any supporting data)
      The average exam score for most of our GE physical science courses (i.e. GEOL 110, GEOG 120, OCEA 112) is about 60%, yet many students with such scores report that they thought they had studied suficiently prior to the exam. Practice exams are a way in which students can evaluate their level of preparedness. Pratice exams delivered via Blackboard have the additional benefit of providing feedback that can help students focus on areas where they need the most help.

   b. how each 6-year plan goal above supports the college strategic planning priority goals
      Provides an exceptional learning environment to promote student success.

2. What strategies/activities would you undertake to accomplish each 6-year plan goal?
   Ask instuctors to contribute questions to an Earth Science test bank. TA's and/or BOT interns could help enter them into Blackboard.

3. How will you demonstrate that you have accomplished each 6-year plan goal (be sure to include how data will be collected/assessed)?
   Blackboard records for the practice exams will be compared against actual exam performance. We anctipate positive correlation between practice exam activity and actual exam scores.

F. <u>Department/Unit Resources and Development</u>

1. What is/are your six-year goal(s) in this area?
   Secure appropriate work, office, and storage space in the refurbished 300N building as well as three lecture classrooms. One of these classrooms must hold a minimum of 55 students.

Briefly explain:

a. why each 6-year plan goal was chosen (include any supporting data)
   Since Earth Science classrooms must be equipped with maps and/or geologic specimens, we can not use just any classroom on campus. We had three dedicated Earth Science classrooms in the now-demolished 300W building. These were rooms 306, 315 and 316 which held 55, 37 and 37 students respectively. We have been temporary teaching in rooms 38G-102, 38E-101 and 38E-102, but will be moving into the refurbished 300N building (#36) fall 2010. The classroom sizes must be at least comparable to those in 306, 315, and 316. Ideally they should be larger to accommodate the growth we have seen in recent years.

   We should also plan to replicate our current office/storage/workroom facilities (building #37 or 300A) into the refurbished 300N building (#36), as building #37 may be demolished at some future date.

b. how each 6-year plan goal above supports the college strategic planning priority goals
   Provide an Exceptional Learning Environment to Promote Student Success

2. What strategies/activities would you undertake to accomplish each 6-year plan goal?
   Work closely with Tim Flood and GafCon to see that our needs are met.

3. How will you demonstrate that you have accomplished each 6-year plan goal (be sure to include how data will be collected/assessed)?
   NA

G. <u>Faculty/Staff Professional Development</u>

1. What is/are your six-year goal(s) in this area?
   Offer staff development field trips that will explore water issues affecting our community.

Briefly explain:

a. why each 6-year plan goal was chosen (include any supporting data)
   To promote water-resource awareness and develop ties with federal, state and local water agencies that will support our plan to develop a water science program.

b. how each 6-year plan goal above supports the college strategic planning priority goals
   Develops innovative partnerships that meet long-term community needs
   and promotes employee success

2. What strategies/activities would you undertake to accomplish each 6-year plan goal?
   Plan and conduct water-awareness professional development field trips.

3. How will you demonstrate that you have accomplished each 6-year plan goal (be sure to include how data will be collected/assessed)?
   Faculty evaluations of professional development field trips.

H. <u>Curriculum Development</u>

1. What is/are your six-year goal(s) in this area?
   1. Improve lab activities.

   2. Develop an online Natural Disasters GEOL 230 course.

Briefly explain:

a. why each 6-year plan goal was chosen (include any supporting data)
   1. Often students will have difficulty completing lab activities because they lack motivation and/or the requisite problem solving skills. We have observed that students show marked improvement in both these areas when computer assisted activities are used.

   2. Improve efficiency in GEOL 230.

b. how each 6-year plan goal above supports the college strategic planning priority goals
   1. Responds to changing community needs.
   Provides an exceptional learning environment to promote student success.

   2. Maximize revenue from traditional and non-traditional sources

2. What strategies/activities would you undertake to accomplish each 6-year plan goal?
   1. Develop computer-based lab activities. These include GIS and Google Earth tied exercises as well as stand-alone instructor-developed applications. As the computer-based component of our labs grow we may find the existing facilities in the science learning center unable to accommodate all of our students and/or impractical to use because they require students to leave the lab classroom. Thus we anticipate the need for a set of laptop computers for dedicated lab use at some time within the next six years.

   2. Convert existing GEOL 230 curriculum to online format.

3. How will you demonstrate that you have accomplished each 6-year plan goal (be sure to include how data will be collected/assessed)?
   1. Computer-based instructional modules will be developed and available for review.

   2. GEOL 230 will be offered online.

I. Staffing Needs

1. Please explain your projected needs for staffing (include data to support your needs)?
   We have no staffing needs at this time other than waiting for the budget to improve so that the approved Earth Science lab technician position can be funded.

J. Student Outcomes

If you are in an instructional area and have not done so already, complete your six-year student outcome assessment plan by going to http://www.grossmont.edu/student_learning_outcomes/SLO%20Spreadsheet%20home.htm, clicking on your department link, and completing the spreadsheet. **NOTE: the student outcome plan spreadsheet was due online by October 2nd.**

THE DEADLINE FOR SUBMITTING THIS COMPLETED SIX-YEAR DEPARTMENT/UNIT PLAN TO YOUR DEAN IS FRIDAY, NOVEMBER 6th, 2009.

Earth Sciences
PROGRAM REVIEW COMMITTEE
SUMMARY EVALUATION
Fall 2006

Geography

SCHOOL YEAR	FALL SEMESTER		SPRING SEMESTER		COST/FTES	COMMITTEE RECOMMENDATION
	WSCH/FTEF	% of MAX WSCH	WSCH/FTEF	% of MAX WSCH		
99/00	622	90%	560	81%	$1,427	MAINTAIN
00/01	558	82%	535	79%	$1,651	
01/02	567	84%	568	86%	$1,650	
02/03	585	87%	543	82%	$1,851	
03/04	583	87%	532	79%	$2,205	

Geology

SCHOOL YEAR	FALL SEMESTER		SPRING SEMESTER		COST/FTES	COMMITTEE RECOMMENDATION
	WSCH/FTEF	% of MAX WSCH	WSCH/FTEF	% of MAX WSCH		
99/00	528	92%	536	86%	$2,508	MAINTAIN
00/01	533	93%	480	76%	$1,277	
01/02	456	80%	495	75%	$1,118	
02/03	480	84%	485	84%	$1,839	
03/04	490	86%	422	74%	$2,321	

Oceanography

SCHOOL YEAR	FALL SEMESTER		SPRING SEMESTER		COST/FTES	COMMITTEE RECOMMENDATION
	WSCH/FTEF	% of MAX WSCH	WSCH/FTEF	% of MAX WSCH		
99/00	573	103%	525	95%	$1,288	MAINTAIN
00/01	485	87%	443	80%	$1,833	
01/02	528	95%	424	76%	$1,960	
02/03	495	89%	453	82%	$2,268	
03/04	509	90%	547	96%	$1,508	

The Program Review Committee commends the department for:

1. Extending learning by providing extensive activities outside the classroom, including self-guided field trips and structured field courses, computer based assignments, voluntary pre-exam review sessions and use of study guides and workbooks.
2. Creating interest and motivating students as evidenced by high student success rates, energized faculty and high number of returning students.
3. Creating and expanding field course offerings and for ensuring that they are accessible to students with disabilities.
4. Developing new courses for geology and oceanography that better prepare students for transfer to four year universities and for expanded general education offerings.
5. Developing and using new technologies in the classroom, including computer assisted learning applications with real-time 3D modeling capabilities, GPS units, thermal infrared temperature sensors and Guidance Information Systems.
6. Demonstrating extensive campus leadership by chairing curriculum, professional development and program review committees.
7. Ensuring consistency in quality and rigor of instruction while maintaining a high level of camaraderie among full-time and part-time faculty.

The Program Review Committee offers the following recommendations:

1. Develop a job description for a shared technician with Chemistry and pursue hiring as programs expand.
2. Restore funding for field classes.
3. Fund the purchase of necessary supplies and technology.
4. Continue working with the Facilities Committee to secure appropriate work, office, storage space as well as a large lecture classroom.
5. Create a link with an appropriate-level English composition course and Geography 130. Evaluate the level of student success as compared to Geography 130 courses without a link.
6. Collaboratively write student-learning outcomes and collectively agree upon their assessment methods to be written in course syllabi. Use student-learning outcome data for continued course and program improvement.
7. Using the Course History Information Report, continue to submit curriculum modification proposals for those courses that have not been reviewed by the Curriculum Committee in more than four years or curriculum deletion forms for those courses that have not been offered in the last three years.

College President	Department Chair	Academic Program Review Chair

APPENDIX 2 – CATALOG DESCRIPTIONS

GEOGRAPHY

Geography is the study of spatial aspects of the physical environment, human activities and landscapes, and the nature of their interactions. Geographers draw upon theories from both the physical and social sciences. As physical scientists, they study the processes and resulting features of the earth's surface, such as vegetation, climate, soils, landforms, and resources. As social scientists, geographers explore such topics as the arrangement of societies on the earth's surface, land use patterns, urbanization, resources and energy usage, and environmental conservation. Therefore, geography includes a wide range and variety of academic disciplines in both the physical and social sciences. It is truly an integrating discipline.

The associate degree program with a major in geography will prepare students to transfer to four-year institutions where they can complete baccalaureate degrees in geography and other disciplines. It is recommended, however, that students consult the catalog of the transfer institution for specific requirements. Many university geography graduates enter teaching professions at all levels. Multiple federal, city, county and state governments, as well as private companies, hire geographers in the fields of resource management, geographic information systems, urban planning, and environmental planning because of their broad training. For example, the U.S. Geologic Survey traditionally hires geographers in map making, air photo interpretation, satellite image analysis, and land use mapping.

Career Opportunities

Aerial Photograph Interpreter
Computer Mapping (G.I.S.)*
Demographer*
Ecologist*
Environmental Analyst*
Geographer*
Land Planner*
Meteorologist*
Satellite Image Processor*
Site Planner*
Spatial Analyst*
Surveyor
Teacher/Professor*
Water Resources Manager*
*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Apply the scientific method.
2. Demonstrate spatial literacy.
3. Analyze spatial information and patterns.
4. Evaluate relationships between humans and the environment.
5. Employ geoscience technology for spatial data management.

Associate Degree Major Requirements

Note: All courses in the major must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Geography 104	Introduction to Geographic Information Science	3
Geography 120	Elements of Physical Geography	3
Geography 121	Physical Geography Laboratory	1
Geography 130	Human and Cultural Geography	3
Geography 140	Introduction to Meteorology	3
Geography 150	Field Study of Natural History of San Diego County	3
Geography 170	The Geography of California	3
Geology 110	Planet Earth	3
	Total Required	22
	Plus General Education and Elective Requirements	

Recommended Electives:

Subject & Number	Title	Units
Geography 172	Field Exploration: Colorado Plateau	3
Geography 173	Field Exploration: Cascade Range/Modoc Plateau	3
Geography 174	Field Exploration: Basin and Range Province	3
Geography 175	Field Exploration: California Coastal Mountains	3
Geography 176	Field Exploration: Sierra Nevada	3
Mathematics 150	Introduction to Computer Programming Applications in Mathematics	3
Mathematics 160	Elementary Statistics	3
Three semesters of a foreign language or high school equivalency [Spanish 120A and 120B are equivalent to one semester of Spanish 120]		15

GEOLOGY

Geology is the scientific study of the planet earth. Geologists study the origin and evolution of the earth and various life forms, the composition of the earth, its structures, and the many processes which modify the earth's crust. Geology is an interdisciplinary science with many applied aspects including: the study of natural resources such as water, petroleum, and minerals; the mitigation of earth's hazards such as earthquakes, landslides, and volcanoes; and land use planning. Students who are curious about our planet and its environment, and want to meet the challenges presented by the interaction of humans with the earth should consider geology as a major.

The curriculum leads to the Associate in Science degree in Geology and will prepare students for upper division coursework at a baccalaureate institution. However, it is recommended that students consult the catalog of the transfer institution for specific course requirements.

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Career Opportunities
Engineering Geologist*
Environmental Geologist*
Geochemist*
Geology Assistant
Geophysicist*
Hydrogeologist*
Marine Geologist*
Mineralogist*
Oceanographer*
Paleobotanist/Paleontologist*
Petroleum Geologist*
Petrologist*
Seismologist*
Soils Technician
Teacher/Professor*
Volcanologist*
Waste Management Geologist*
*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:
1. Recognize and explain the role of fundamental geologic principles, such as plate tectonic theory and deep time, in the interpretation of observed geologic phenomena.
2. Research, evaluate, and cite scientific information in order to formulate coherent summaries of earth processes.
3. Define the scientific method and apply it to observed geologic phenomena.
4. Interpret geologic processes using underlying chemical properties and physical laws.
5. Measure, manipulate, and interpret scientific data.

Associate Degree Major Requirements
Note: All courses in the major must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Chemistry 141	General Chemistry I	5
Chemistry 142	General Chemistry II	5
Geology 110	Planet Earth	3
Geology 111	Planet Earth Laboratory	1
Geology 121	Earth History	4
Mathematics 180	Analytic Geometry and Calculus I	5
	Total	23

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Biology 120	Principles of Biology	4
Mathematics 280	Analytic Geometry and Calculus II	4
Physics 140	Mechanics of Solids	4
Physics 240	Electricity, Magnetism and Heat	4
	Total	8

Select a minimum of SIX (6) units from the following:

Subject & Number	Title	Units
Geography 104	Introduction to Geographic Information Science (GIS)	3
Astronomy 110	Descriptive Astronomy	3
Geography 120	Elements of Physical Geography	3
Geography 140	Introduction to Meteorology	3
Geology 150	Field Study of the Natural History of San Diego County	3
Geology 162	Geologic Field Studies: Southern California Mountain Areas	1
Geology 163	Geologic Field Studies: Mojave Desert and Adjacent Areas	1
Geology 164	Geologic Field Studies: Southern California Coastal Areas	1
Geology 165	Geologic Field Studies: Colorado Desert/Salton Trough Area	1
Geology 172	Field Exploration: Colorado Plateau	3
Geology 173	Field Exploration: Cascade Range/Modoc Plateau	3
Geology 174	Field Exploration: Basin and Range Province	3
Geology 175	Field Exploration: California Coastal Mountains	3
Geology 176	Field Exploration: Sierra Nevada	3
Geology 210	Geology of California	4
Geology 220	Geology of National Parks	4
Geology 230	Natural Disasters	3
Oceanography 112	Introduction to Oceanography	3
Oceanography 113	Oceanography Laboratory	1
	Total	6
	Total Required	37
	Plus General Education and Elective Requirements	

GERMAN
This program is designed to provide students with skills in understanding, speaking, reading, and writing German. It also gives students a greater understanding of German culture and civilization and prepares them for greater international and domestic career opportunities.

For the suggested sequence of courses to be taken, and/or for assistance in transferring to a four-year institution, students should consult the Counseling Center or the Department of Foreign Languages.

Career Opportunities
Diplomatic Officer*
Foreign Correspondent*
Foreign Exchange Clerk
Foreign Service Officer
Intelligence Specialist*
Interpreter/Translator*
Immigration Inspector
Journalist*
Teacher/Professor*
Public Relations Specialist*
*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:
1. Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health, and well-being, professions and occupations, the arts, current events, and politics.
2. Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city, life, health and well-being, professions, and the arts, current events, and politics.

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Occupational Therapy Assistant 200	Occupational Skills Development in Adult Roles	4
Occupational Therapy Assistant 210	Assistive Technology in Occupational Therapy	3
Occupational Therapy Assistant 220	Occupational Skills Development in Geriatric Roles	4
Occupational Therapy Assistant 230	Occupational Therapy Management	2
Occupational Therapy Assistant 240	Field Work Level II-Rotation I	4
Occupational Therapy Assistant 241	Field Work Level II-Rotation II	4
	Total	54
	Plus General Education Requirements	14
	Total Required	68

OCEANOGRAPHY

Oceanography applies an eclectic mix of natural sciences to the study of the world's oceans. Physics, chemistry, biology, geology, geography, meteorology and even astronomy contribute to understanding the composition, structure and motion of seawater, and its interaction with the lithosphere, atmosphere and biosphere.

Although a few four-year institutions offer undergraduate degrees in oceanography, students who pursue oceanographic studies typically complete undergraduate degrees in one or more of the aforementioned natural sciences, then later apply that knowledge to graduate study in oceanography. The associate degree in oceanography outlined below provides beginning lecture, lab and field courses in oceanography, plus a solid foundation of math and appropriate science courses upon which transferring students can build baccalaureate degrees that are later applied in graduate oceanographic studies.

Career Opportunities

Aquarist
Boat Captain
Chemical Oceanographer*
Climatologist*
Environmental Advocate
Marine Archaeologist*
Marine Biologist*
Marine Economist*
Marine Geologist/Geophysicist*
Marine Lawyer*
Marine Policy Specialist*
Ocean Engineer*
Ocean Fisheries Specialist*
Ocean Resource Management*
Ocean Technician
Physical Oceanographer*
Teacher*
*Bachelor's degree or higher required.

The Program-level Student Learning Outcome (PSLO) below is an outcome that students will achieve after completing specific degree/certificate requirements in this program.

Students will find, use and evaluate resources for oceanographic information.

Associate Degree Major Requirements

Note: All courses in the major must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Chemistry 141	General Chemistry I	5
Chemistry 142	General Chemistry II	5
Geology 110	Planet Earth	3
Mathematics 180	Analytic Geometry and Calculus I	5
Oceanography 112	Introduction to Oceanography	3
Oceanography 113	Oceanography Laboratory	1
	Total	22

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Biology 105	Life in the Sea	4
Biology 120	Principles of Biology	4
Mathematics 280	Analytic Geometry and Calculus II	4
Physics 140	Mechanics of Solids	4
Physics 240	Electricity, Magnetism and Heat	4
	Total	8

Select SIX (6) units from the following courses:

Subject & Number	Title	Units
Biology 110	Environmental Biology	4
Biology 132	Mammals of the Sea	2
Chemistry 110	Environmental Chemistry	3
Geography 104	Introduction to Geographic Information Science (GIS)	3
Geography 120	Elements of Physical Geography	3
Geography 140	Introduction to Meteorology	3
Geology 121	Earth History	4
Geology 162	Geologic Field Studies: Southern California Mountain Areas	1
Geology 163	Geologic Field Studies: Mojave Desert and Adjacent Areas	1
Geology 164	Geologic Field Studies: Southern California Coastal Areas	1
Geology 165	Geologic Field Studies: Colorado Desert/Salton Trough Area	1
Geology 172	Field Exploration: Colorado Plateau	3
Geology 173	Field Exploration: Cascade Range/Modoc Plateau	3
Geology 174	Field Exploration: Basin and Range Province	3
Geology 175	Field Exploration: California Coastal Mountains	3
Geology 176	Field Exploration: Sierra Nevada	3
Geology 210	Geology of California	4
Geology 220	Geology of National Parks	4
Geology 230	Natural Disasters	3
Oceanography 150	Field Study of the Natural History of San Diego County	3
	Total	6
	Total Required	36
	Plus General Education and Elective Requirements	

Geography (GEOG)

Geography 104 †
Introduction to Geographic Information Science
3 units, 2 hours lecture, 3 hours laboratory
Prerequisite: *A "C" grade or higher or "Pass" in MATH 103 or MATH 110 or equivalent.*
Fundamental concepts in geographic information systems including cartography, global positioning systems (GPS), remote sensing, and spatial statistics. Hands-on use of current, industry-standard computer technologies that enhance geographic analysis and improve decision-making abilities for solving geospatial problems in a wide range of applications.
Satisfies General Education for: Grossmont College A3
Transfers to: CSU, UC

Geography 106 †
World Regional Geography
3 units, 3 hours lecture
Although open to all students this course is designed for Liberal Studies education majors wishing to satisfy requirements for California Multiple Subject Teaching Credentials. This course focuses on the overarching principles of cultural geography as applied to regions of the world. Ethnicity, demography, language, religion, settlement patterns, economics, and geopolitics provide the framework for comparing the contrasting the world's six major regions, their cultural and environmental character, and current problems and crises as they impact the global community.
Satisfies General Education for: Grossmont College D1; CSU D5; IGETC 4E
Transfers to: CSU, UC

Geography 120 †
Elements of Physical Geography
3 units, 3 hours lecture
Explore your world! This physical science course describes and explains the earth's major physical systems, the basic energy and material flows by which these systems operate, and the result of human interaction with these flows. Phenomena explored include storms, climate, ecosystems, seasonal change, plate tectonics, stream and glacial activity, and beach systems.
Satisfies General Education for: Grossmont College B2; CSU B1; IGETC 5A
Transfers to: CSU, UC

† This course meets all Title 5 standards for Associate Degree Credit.

Geography 121 †
Physical Geography Laboratory
1 unit, 3 hours laboratory
Corequisite: *A "C" grade or higher or "Pass" or concurrent enrollment in Geography 120.*
Laboratory to augment Physical Geography 120. Practical applications of earth-sun relationships, map reading and utilization, weather principles, climates, and understanding of landforms through laboratory and field exercises.
Satisfies General Education for: Grossmont College B2; CSU B3; IGETC 5C
Transfers to: CSU, UC

Geography 130 †
Human and Cultural Geography
3 units, 3 hours lecture
An exciting course examining the role of culture and the physical environment in shaping the world's major regions and landscapes. Special attention will be given to the diffusion of religions and languages, population dynamics, food production and ways of living, geopolitical conflicts, and human-environmental interactions to better relate these cultural factors to current international events and problems.
Satisfies General Education for: Grossmont College D1; CSU D5; IGETC 4E
Transfers to: CSU, UC

Geography 140 †
Introduction to Meteorology
3 units, 3 hours lecture
This physical science course examines fundamental concepts about the nature of the atmosphere, and explains the physical processes responsible for everyday weather phenomena. Highlights include explanation of mid-latitude cyclonic storm activity and tropical cyclones. Weather maps and satellite imagery will be used extensively.
Satisfies General Education for: Grossmont College B2; CSU B1; IGETC 5A
Transfers to: CSU, UC

Geography 150 †
(Biology 150, Geology 150, Oceanography 150)
Field Study of the Natural History of San Diego County
3 units, 2 hours lecture, 3 hours laboratory
Prerequisite: *A "C" grade or higher or "Pass" in Biology 110 or 120; or Geography 120 or 121 or 140; or Geology 110 or 111; or Oceanography 112 or equivalent.*
A team-taught field study of the natural history of San Diego County and environs, with special attention to the role of biologic, geographic, and geologic processes that shape its development. Emphasis on field measurement techniques and use of technology. Four weekends in spring semester only. Campouts required. Students with credit in Geography 150 will not be able to enroll in Biology 150, Geology 150 or Oceanography 150.
Transfers to: CSU, UC (credit limited: see page 37)

Geography 170 †
The Geography of California
3 units, 3 hours lecture
This course is an exciting exploration of the physical and cultural regions of California and their interrelationships. Emphasis on the geographic factors that would broaden a student's knowledge of the California environment; climate, natural vegetation, plate tectonic situation, agriculture, industry, and population.
Satisfies General Education for: Grossmont College D1; CSU D5; IGETC 4E
Transfers to: CSU, UC

Geography 172 †
(Geology 172)
Field Exploration: Colorado Plateau
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the Colorado Plateau. Lectures en route and on site may include the origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants, and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as the Grand Canyon, Zion National Park, Sunset Crater, and the Mogollon Rim. Students will learn various field study techniques including map interpretation, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geography 173 †
(Geology 173)
Field Exploration: Cascade Range/Modoc Plateau
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the southern Cascade Range and the Modoc Plateau. Lectures en route and on site may include origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as Lava Beds National Monument, McArthur-Burney

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Falls State Park, and Lassen Volcanic National Park. Students will learn various field study techniques including map interpretation, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

GEOGRAPHY 174 †
(Geology 174)
Field Exploration: Basin and Range Province
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the Basin and Range Province. Lectures en route and on site may include the origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants, and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as Owens Valley, Death Valley, the Lake Mead area, and Great Basin National Park. Students will learn various field study techniques including map interpretations, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

GEOGRAPHY 175 †
(Geology 175)
Field Exploration: California Coastal Mountains
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the California coastal mountain region. Lectures en route and on site will examine the origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants, and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as along the San Andreas fault system, the Coast Ranges, and the Klamath Mountains. Students will learn various field study techniques including map interpretation, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

GEOGRAPHY 176 †
(Geology 176)
Field Exploration: Sierra Nevada
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the Sierra Nevada mountains. Lectures en route and on site may include the origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants, and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as the Yosemite, Sequoia, and Kings Canyon National Parks, the Mammoth Lakes area, and Mono Lake. Students will learn various field study techniques including map interpretation, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

GEOGRAPHY 199
Special Studies or Projects in Geography
1-3 units, 3-9 hours
Prerequisite: *Consent of instructor.*
Individual study, research or projects in the field of geography under instructor guidance. Written reports and periodic conferences required. Content and unit credit to be determined by student/instructor conferences and/or division. May be repeated for a maximum of nine units.

GEOGRAPHY 298 ††
Selected Topics in Geography
1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in geography not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/student need(s) and/or available staff. May be offered as a seminar or lecture class. Pass/No Pass only.
Non-associate degree applicable

GEOGRAPHY 299A †
Selected Topics in Geography
1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in geography not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/student need(s) and/or available staff. May be offered as a seminar or lecture class.
Associate degree applicable

GEOGRAPHY 299B †
Selected Topics in Geography
1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in geography not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/student need(s) and/or available staff. May be offered as a seminar or lecture class.
Baccalaureate level-CSU transfer

GEOLOGY (GEOL)

GEOLOGY 104 †
Earth Science
3 units, 3 hours lecture
This course is designed for Liberal Studies education majors wishing to satisfy requirements for California Multiple Subject Teaching Credentials. This physical science course describes and explains the Earth's major physical systems, the basic energy and material flows by which these systems operate, and the comparative place of our planet within the larger solar systems. As such, this course provides a brief synthesis of the disciplines of astronomy, physical geography, meteorology, oceanography, and geology. Not acceptable for a major in geology.
Satisfies General Education for: Grossmont College B2; CSU B1; IGETC 5A
Transfers to: CSU, UC

GEOLOGY 110 †
Planet Earth
3 units, 3 hours lecture
This introductory physical science course investigates the composition of the earth and the geologic processes by which it formed. Emphasis is placed on the earth's unifying theory—"plate tectonics" and the associated activities of volcanism, earthquakes, and mountain building. Topics will include crystals, minerals and rocks, their distribution within the planet, and the evolution of the earth across deep time. The sculpturing of the surface of the planet by wind, waves, streams, glaciers, and landslides will also be considered.
Satisfies General Education for: Grossmont College B2; CSU B1; IGETC 5A
Transfers to: CSU, UC

† This course meets all Title 5 standards for Associate Degree Credit.
†† This course meets all Title 5 standards for Nondegree Credit.

Geology 111 †
Planet Earth Laboratory
1 unit, 3 hours laboratory
Corequisite: *A "C" grade or higher or "Pass" or concurrent enrollment in Geology 110 or equivalent.*
Provides hands-on experience to accompany and augment Geology 110. This course will include laboratory and field investigations of the Earth, emphasizing experience with minerals, rocks, and fossils, as well as topographic and geologic maps. Field trips will acquaint students with local rock units, and past and present geologic processes.
Satisfies General Education for: Grossmont College B2; CSU B3; IGETC 5C
Transfers to: CSU, UC

Geology 121 †
Earth History
4 units, 3 hours lecture, 3 hours laboratory
Recommended Preparation: *A "C" grade or higher or "Pass" in Geology 110 or equivalent.*
This is a required course for geology majors. The lecture portion will cover the geological development of earth and its importance to the evolution of life on this planet as evidenced in the fossil record. Laboratory work will include, but is not limited to, the detailed study of sedimentary petrology, stratigraphy, identification of fossil phyla, and local field investigations. Emphasis will be placed on the application of rock and fossil interpretations to the reconstruction of ancient environments and their evolution through geologic time. This course will be offered at least every other spring semester.
Satisfies General Education for: Grossmont College B2; CSU B1; IGETC 5A
Transfers to: CSU, UC

Geology 150 †
(Biology 150, Geography 150, Oceanography 150)
Field Study of the Natural History of San Diego County
3 units, 2 hours lecture, 3 hours laboratory
Prerequisite: *A "C" grade or higher or "Pass" in Biology 110 or 120; or Geography 120 or 121 or 140; or Geology 110 or 111; or Oceanography 112 or equivalent.*
A team-taught field study of the natural history of San Diego County and environs, with special attention to the role of biologic, geographic, and geologic processes that shape its development. Emphasis on field measurement techniques and use of technology. Four weekends in spring semester only. Campouts required. Students with credit in Geology 150 will not be able to enroll in Biology 150, Geography 150, or Oceanography 150.
Transfers to: CSU, UC (credit limited: see page 37)

† This course meets all Title 5 standards for Associate Degree Credit.

Geology 162 †
Geologic Field Studies: Southern California Mountain Areas
1 unit, 1 hour lecture
This course involves lecture and field study of geologic processes and features in selected areas of the southern California mountains. Lectures will examine the regional geomorphic features, identify the specific rock types, and discuss the tectonic setting of the area to be visited, with emphasis on the overall geologic evolution of the area. Study areas will include, but are not limited to, various locations within the Peninsular Ranges and Transverse Ranges. Students are trained in various field study techniques such as map and cross-section development and the use of geologic instruments. The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geology 163 †
Geologic Field Studies: Mojave Desert and Adjacent Areas
1 unit, 1 hour lecture
This course involves lecture and field study of geologic processes and features in selected areas of the Mojave Desert and adjacent areas. Lectures will examine the regional geomorphic features, identify the specific rock types, and discuss the tectonic setting of the area to be visited, with emphasis on the overall geologic evolution of the area. Study areas will include, but are not limited to, various locations within the Mojave Desert and Joshua Tree National Park. Students are trained in various field study techniques such as map and cross-section development and the use of geologic instruments. The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geology 164 †
Geologic Field Studies: Southern California Coastal Areas
1 unit, 1 hour lecture
This course involves lecture and field study of geologic processes and features in selected areas of the southern California coastline. Lectures will examine the regional geomorphic features, identify the specific rock types, and discuss the tectonic setting of the area to be visited, with emphasis on the overall geologic evolution of the area. Study areas will include, but are not limited to, various locations within the Channel Islands, southern Coast Ranges, and coastal regions from San Diego County northward to Santa Barbara County. Students are trained in various field study techniques such as map and cross-section development and the use of geologic instruments. The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geology 165 †
Geologic Field Studies: Colorado Desert/Salton Trough Area
1 unit, 1 hour lecture
This course involves lecture and field study of geologic processes and features in selected areas of the Colorado Desert/ Salton Trough region. Lectures will examine the regional geomorphic features, identify the specific rock types, and discuss the tectonic setting of the area to be visited, with emphasis on the overall geologic evolution of the area. Study areas will include, but are not limited to, various locations within the Anza Borrego Desert State Park and the Salton Trough. Students are trained in various field study techniques such as map and cross-section development and the use of geologic instruments. The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geology 172 †
(Geography 172)
Field Exploration: Colorado Plateau
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the Colorado Plateau. Lectures en route and on site may include the origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants, and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as the Grand Canyon, Zion National Park, Sunset Crater, and the Mogollon Rim. Students will learn various field study techniques including map interpretation, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

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Geology 173 †
(Geography 173)
Field Exploration: Cascade Range/Modoc Plateau
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the southern Cascade Range and the Modoc Plateau. Lectures en route and on site may include origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as Lava Beds National Monument, McArthur-Burney Falls State Park, and Lassen Volcanic National Park. Students will learn various field study techniques including map interpretation, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geology 174 †
(Geography 174)
Field Exploration: Basin and Range Province
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the Basin and Range Province. Lectures en route and on site may include the origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants, and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as Owens Valley, Death Valley, the Lake Mead area, and Great Basin National Park. Students will learn various field study techniques including map interpretations, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geology 175 †
(Geography 175)
Field Exploration: California Coastal Mountains
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture and field study of natural processes and features in selected areas of the California coastal mountain region. Lectures en route and on site will examine the origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants, and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as along the San Andreas fault system, the Coast Ranges, and the Klamath Mountains. Students will learn various field study techniques including map interpretation, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geology 176 †
(Geography 176)
Field Exploration: Sierra Nevada
3 units, 2 hours lecture, 3 hours laboratory
This week-long course involves lecture field study of natural processes and features in selected areas of the Sierra Nevada mountains. Lectures en route and on site may include the origin, evolution, and significance of the region's tectonic setting, geomorphic features, hydrology, native plants, and weather. The course may also examine human-environment interactions as well as spatial and temporal variations in areas such as the Yosemite, Sequoia, and Kings Canyon National Parks, the Mammoth Lakes area, and Mono Lake. Students will learn various field study techniques including map interpretation, map analysis, and the use of field instruments including mineral and rock identification tools, compasses, and global positioning devices (GPS). The course requires field trip travel, often including overnight camping and light to moderate hiking.
Transfers to CSU

Geology 199
Special Studies or Projects in Geology
1-3 units, 3-9 hours
Prerequisite: *Consent of instructor.*
Individual study, research or projects in the field of geology under instructor guidance. Written reports and periodic conferences required. Content and unit credit to be determined by student/instructor conferences and/or division. May be repeated for a maximum of six units.

Geology 210 †
Geology of California
3 units, 3 hours lecture
This course examines the development of California's landscape and scenery by various geologic processes. Each of California's natural provinces will be studied in terms of tectonic structures, mineral deposits, rock and fossil occurrences, and geologic hazards. Field trips may be required.
Satisfies General Education for: Grossmont College B2; CSU B1; IGETC 5A
Transfers to: CSU, UC

Geology 220 †
Geology of the National Parks
3 units, 3 hours lecture
Geological survey of the landforms, structure, rocks and ecology of our National parks. Emphasis will be placed on the geological development of the park through time, and their past and future benefit to people. Field trips may be required.
Satisfies General Education for: Grossmont College B2; CSU B1
Transfers to CSU

Geology 230 †
Natural Disasters
3 units, 3 hours lecture
This course examines the geological and meteorological principles underlying natural disasters such as earthquakes, landslides, flooding, volcanic eruptions, and severe weather phenomena. Students will explore how dynamic earth processes affect human activities and discuss options for mitigation of these natural phenomena.
Satisfies General Education for Grossmont College B2
Transfers to: CSU, UC

Geology 298 ††
Selected Topics in Geology
1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in geology not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/student need(s) and/or available staff. May be offered as seminar or lecture class. Pass/No Pass only.
Non-associate degree applicable

Geology 299A †
Selected Topics in Geology
1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in geology not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/student need(s) and/or available staff. May be offered as seminar or lecture class.
Associate degree applicable

† This course meets all Title 5 standards for Associate Degree Credit.
†† This course meets all Title 5 standards for Nondegree Credit.

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Geology 299B †
Selected Topics in Geology
1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in geology not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/ student need(s) and/or available staff. May be offered as seminar or lecture class.
Baccalaureate level-CSU transfer

German (GERM)

German 120 †
German I
5 units, 5 hours lecture
An introductory course to the German language and the cultures of its speakers. This course is designed for students with very little or no knowledge of German. It facilitates the practical application of the language in everyday oral and written communication at the beginning level. Since the focus will be on basic communication skills, the class will be conducted in German as much as possible. Students will learn structures that will enable them to function in German in everyday contexts while becoming familiar with the German speaking world.
Satisfies General Education for: Grossmont College C2; CSU C2; IGETC 6A
Transfers to: CSU, UC

German 121 †
German II
5 units, 5 hours lecture
Prerequisite: *A "C" grade or higher or "Pass" in German 120 or two years of high school German or equivalent.*
German 121 is the continuation of German 120. The course will continue to develop oral and written skills based on practical everyday needs.
Satisfies General Education for: Grossmont College C2; CSU C2; IGETC 3B
Transfers to: CSU, UC

German 196 A-B-C-D †
Community Service Learning Experience
1 unit, 5 hours work experience per week
Prerequisite: *A "C" grade or higher or "Pass" in German 121 or equivalent.*
Community Service Learning Experience (CSLE) is a community outreach program which promotes the national agenda of volunteer engagement. The purpose is to provide students the opportunity to explore options and careers in a selected area of study. For work experience requirements, see page 27.
Transfers to CSU

German 199
Special Studies or Projects in German
1-3 units, 3-9 hours
Prerequisite: *Consent of instructor.*
Individual study, research or projects in the field of German under instructor guidance. Written reports and periodic conferences required. Content and unit credit to be determined by student/ instructor conferences and/or division. May be repeated for a maximum of nine units.

German 220 †
German III
5 units, 5 hours lecture
Prerequisite: *A "C" grade or higher or "Pass" in German 121 or three years of high school German or equivalent.*
German 220 is the continuation of German 121. The course will continue to develop oral, listening, reading and writing skills in order to acquire proficiency in German.
Satisfies General Education for: Grossmont College C2; CSU C2; IGETC 3B
Transfers to: CSU, UC

German 221 †
German IV
5 units, 5 hours lecture
Prerequisite: *A "C" grade or higher or "Pass" in German 220 or four years of high school German or equivalent.*
German 221 is the continuation of German 220. The course will continue to develop oral, listening, reading and writing skills in order to improve proficiency in German.
Satisfies General Education for: Grossmont College C2; CSU C2; IGETC 3B
Transfers to: CSU, UC

German 250 †
Conversational German I
3 units, 3 hours lecture
Prerequisite: *A "C" grade or higher or "Pass" in German 121 or three years of high school German or equivalent.*
The course will continue to develop oral, listening, reading and writing skills with emphasis on oral proficiency.
Satisfies General Education for: Grossmont College C2; CSU C2
Transfers to: CSU, UC

German 251 †
Conversational German II
3 units, 3 hours lecture
Prerequisite: *A "C" grade or higher or "Pass" in German 250 or four years of high school German or equivalent.*
The course will continue to develop at a higher level oral, listening, reading and writing skills with emphasis on oral proficiency.
Satisfies General Education for: Grossmont College C2; CSU C2
Transfers to: CSU, UC

German 298 ††
Selected Topics in German
1-5 units, 3-15 hours
Prerequisite: *Varies with topic.*
Selected topics in German not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Arts, Languages and Communication and International Programs in relation to community/ student need(s) and/or available staff. May be offered as a seminar or lecture class. Pass/No Pass only.
Non-associate degree applicable

German 299A †
Selected Topics in German
1-5 units, 3-15 hours
Prerequisite: *Varies with topic.*
Selected topics in German not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Arts, Languages and Communication and International Programs in relation to community/ student need(s) and/or available staff. May be offered as a seminar or lecture class.
Associate degree applicable

German 299B †
Selected Topics in German
1-5 units, 3-15 hours
Prerequisite: *Varies with topic.*
Selected topics in German not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Arts, Languages and Communication and International Programs in relation to community/ student need(s) and/or available staff. May be offered as a seminar or lecture class.
Baccalaureate level-CSU transfer

† This course meets all Title 5 standards for Associate Degree Credit.
†† This course meets all Title 5 standards for Nondegree Credit.

OCCUPATIONAL THERAPY ASSISTANT 299A †

Selected Topics in Occupational Therapy Assistant

1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in Occupational Therapy Assistant not covered by regular catalog offerings. Course content and unit credit to be determined by the Career and Technical Education/Workforce Development in relation to community/student need(s) and/or available staff. May be offered as a seminar or lecture class.
Associate degree applicable

OCCUPATIONAL THERAPY ASSISTANT 299B †

Selected Topics in Occupational Therapy Assistant

1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in Occupational Therapy Assistant not covered by regular catalog offerings. Course content and unit credit to be determined by the Career and Technical Education/Workforce Development in relation to community/student need(s) and/or available staff. May be offered as a seminar or lecture class.
Baccalaureate level-CSU transfer

OCEANOGRAPHY (OCEA)

OCEANOGRAPHY 112 †

Introduction to Oceanography

3 units, 3 hours lecture
A physical science course which examines major aspects of the marine environment. Topics include origin of the oceans, plate tectonics, sea floor features, properties of sea water, ocean climate, currents, waves, tides, coastal landforms, marine ecology, pollution and resources. The development of the field of oceanography and the present and future importance of the oceans are also discussed.
Satisfies General Education for: Grossmont College B2; CSU B1; IGETC 5A
Transfers to: CSU, UC

OCEANOGRAPHY 113 †

Oceanography Laboratory

1 unit, 3 hours laboratory
Corequisite: *A "C" grade or higher or "Pass" or concurrent enrollment in OCEA 112 or equivalent.*
Provides hands-on oceanographic experience to accompany and augment Oceanography 112. The course will include laboratory and field investigations of the marine environment, emphasizing the geological, chemical, physical, and biological aspects of the ocean. Lab activities may include, but are not limited to, obtaining samples and analyzing data, visits to oceanographic facilities (such as research institutions and aquariums), and half-day ocean research voyages.
Satisfies General Education for: Grossmont College B2; CSU B3; IGETC 5C
Transfers to: CSU, UC

OCEANOGRAPHY 150 †
(Biology150, Geography 150, Geology 150)

Field Study of the Natural History of San Diego County

3 units, 2 hours lecture, 3 hours laboratory
Prerequisite: *A "C" grade or higher or "Pass" in Biology 110 or 120; or Geography 120 or 121 or 140; or Geology 110 or 111; or Oceanography 112 or equivalent.*
A team-taught field study of the natural history of San Diego County and environs, with special attention to the role of biologic, geographic, and geologic processes that shape its development. Emphasis on field measurement techniques and use of technology. Four weekends in spring semester only. Campouts required. Students with credit in Oceanography 150 will not be able to enroll in Biology 150, Geography 150 or Geology 150.
Transfers to: CSU, UC (credit limited: see page 37)

OCEANOGRAPHY 199

Special Studies or Projects in Oceanography

1-3 units, 3-9 hours
Prerequisite: *Consent of instructor.*
Individual study, research or projects in the field of oceanography under instructor guidance. Written reports and periodic conferences required. Content and unit credit to be determined by student/instructor conferences and/or division. May be repeated for a maximum of three units.

OCEANOGRAPHY 298 ††

Selected Topics in Oceanography

1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in oceanography not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/student need(s) and/or available staff. May be offered as a seminar or lecture class. Pass/No Pass only.
Non-associate degree applicable

OCEANOGRAPHY 299A †

Selected Topics in Oceanography

1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in oceanography not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/student need(s) and/or available staff. May be offered as a seminar or lecture class.
Associate degree applicable

OCEANOGRAPHY 299B †

Selected Topics in Oceanography

1-3 units, 3-9 hours
Prerequisite: *Varies with topic.*
Selected topics in oceanography not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Mathematics, Natural Sciences, and Exercise Science and Wellness in relation to community/student need(s) and/or available staff. May be offered as a seminar or lecture class.
Baccalaureate level-CSU transfer

ORTHOPEDIC TECHNOLOGY (OT)

ORTHOPEDIC TECHNOLOGY 110 †

Orthopedic Anatomy and Physiology

5 units, 5 hours lecture
Prerequisite: *A "C" grade or higher in Biology 140 or 144 or equivalent.*
Corequisite: *Concurrent enrollment in Orthopedic Technology 111.*
A study of the development of the muscular-skeletal systems with the emphasis divided between gross anatomy, the cellular detail (Histology) of tissues, arterial and venous perfusion, as well as relevant nervous innervation of these systems as they relate to the treatment of orthopedic injuries.
Transfers to CSU

† This course meets all Title 5 standards for Associate Degree Credit.
†† This course meets all Title 5 standards for Nondegree Credit.

APPENDIX 3-

GRADE DISTRIBUTION SUMMARY

Grade Distribution by Division

School: Grossmont College -- Term: 2012SP -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor
G06 -- Mathematics Natural Sciences Ex Sci																		
GEOG-104 Intro to Geog Inform Sci--Gis																		
7644N		3.0	17	0	1	2	3	5	0	0	1	0	4	0	1	0	8	Curran, Judd
Course Total			17	0	1	2	3	5	0	0	1	0	4	0	1	0	8	
GEOG-106 World Regional Geography																		
7645		3.0	28	0	0	3	1	1	0	3	2	1	17	0	0	0	15	Goodman, Mark
8865N		3.0	26	0	5	0	0	7	0	0	7	3	4	0	0	0	23	Therkalsen, Scott
9129		3.0	39	0	3	0	0	12	0	0	10	3	9	2	0	0	14	Therkalsen, Scott
Course Total			93	0	8	3	1	20	0	3	19	7	30	2	0	0	52	
GEOG-120 Elements of Physical Geography																		
7646		3.0	32	0	0	1	1	1	3	1	10	4	11	0	0	0	19	Curran, Judd
7647		3.0	32	0	1	1	0	0	1	1	4	5	16	0	3	0	20	Goodman, Mark
7648		3.0	34	0	0	1	0	2	0	1	6	7	16	0	1	0	16	Curran, Judd
7649		3.0	24	0	0	1	1	3	2	2	1	3	8	0	3	0	23	Curran, Judd
7650		3.0	32	0	3	0	0	5	0	0	7	7	10	0	0	0	19	Therkalsen, Scott
7651		3.0	27	0	3	0	0	4	0	0	11	1	5	1	2	0	23	Therkalsen, Scott
7653N		3.0	27	0	3	2	0	1	1	1	7	2	10	0	0	0	12	Cliffe, Timothy
8864		3.0	42	1	0	3	1	4	6	0	5	4	16	2	0	0	5	Cliffe, Timothy
Course Total			250	1	10	9	3	20	13	6	51	33	92	3	9	0	137	
GEOG-121 Physical Geography Lab																		
7656		1.0	19	1	1	3	0	1	2	3	4	2	1	1	0	0	1	Cliffe, Timothy
7657		1.0	22	2	0	5	4	0	4	1	3	0	2	0	1	0	3	Goodman, Mark
Course Total			41	3	1	8	4	1	6	4	7	2	3	1	1	0	4	

Grade Distribution by Division
School: Grossmont College -- Term: 2012SP -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

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GEOG-130 Human & Cultural Geography																		
7659		3.0	23	0	0	0	0	1	2	1	7	3	9	0	0	0	13	Goodman, Mark
7660		3.0	30	0	4	0	0	13	0	0	6	2	5	0	0	0	10	Therkalsen, Scott
7661		3.0	25	0	0	0	0	1	2	1	3	7	11	0	0	0	14	Goodman, Mark
Course Total			78	0	4	0	0	15	4	2	16	12	25	0	0	0	37	
GEOG-150 Field Study Nat Hist/San Diego																		
7664	8	3.0	9	0	5	0	1	2	1	0	0	0	0	0	0	0	0	Jacobson, Gary
Course Total			9	0	5	0	1	2	1	0	0	0	0	0	0	0	0	
GEOG-170 Geography of California																		
7665		3.0	26	0	4	2	1	2	4	2	3	2	6	0	0	0	14	Curran, Judd
Course Total			26	0	4	2	1	2	4	2	3	2	6	0	0	0	14	
Subject Total			514	4	33	24	13	65	28	17	97	56	160	6	11	0	252	
Division Total			514	4	33	24	13	65	28	17	97	56	160	6	11	0	252	

Grade Distribution by Division
School: Grossmont College -- Term: 2011FA -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOG-106 World Regional Geography																			
3150		3.0	29	0	0	1	0	3	4	2	6	6	6	1	0	0	12	Goodman, Mark	
5925		3.0	27	0	2	0	0	4	0	0	12	6	3	0	0	0	13	Therkalsen, Scott	
9538N		3.0	24	0	5	0	0	5	0	0	9	1	4	0	0	0	28	Therkalsen, Scott	
Course Total			80	0	7	1	0	12	4	2	27	13	13	1	0	0	53		
GEOG-120 Elements of Physical Geography																			
3151		3.0	32	0	0	1	1	1	2	2	9	8	8	0	0	0	21	Curran, Judd	
3152		3.0	40	0	4	0	1	4	3	1	7	6	12	0	0	0	13	Cliffe, Timothy	
3153		3.0	22	0	0	2	1	2	2	1	1	2	11	0	0	0	28	Curran, Judd	
3154		3.0	19	0	0	1	0	2	2	1	1	5	7	0	0	0	31	Curran, Judd	
3155		3.0	25	0	0	4	0	1	1	4	8	4	2	1	0	0	26	Curran, Judd	
3156		3.0	33	0	2	0	1	0	5	1	5	9	9	0	0	0	19	Goodman, Mark	
3157		3.0	35	0	1	0	0	8	0	0	13	4	6	3	0	0	17	Therkalsen, Scott	
3158N		3.0	37	0	1	1	2	4	3	2	6	6	12	0	0	0	14	Cliffe, Timothy	
6008		3.0	29	0	0	0	0	1	2	1	6	8	11	0	0	0	20	Goodman, Mark	
Course Total			272	0	8	9	6	23	20	13	56	52	78	4	0	0	189		
GEOG-121 Physical Geography Lab																			
3160		1.0	17	0	2	0	0	6	0	0	6	0	2	0	0	0	4	Curran, Judd	XP
3161		1.0	18	0	4	0	0	10	0	0	2	1	0	0	0	0	11	Therkalsen, Scott	
Course Total			35	0	6	0	0	16	0	0	8	1	2	0	0	0	15		
GEOG-130 Human & Cultural Geography																			
3164		3.0	29	0	1	0	2	0	2	3	5	7	9	0	0	0	11	Goodman, Mark	

3165	3.0	30	0	3	0	0	10	0	0	9	2	6	0	0	0	12	Therkalsen, Scott
Course Total		59	0	4	0	2	10	2	3	14	9	15	0	0	0	23	
GEOG-140 Introduction to Meteorology																	
3167	3.0	33	3	2	1	1	1	1	6	3	6	7	1	0	0	8	Cliffe, Timothy
Course Total		33	3	2	1	1	1	1	6	3	6	7	1	0	0	8	
GEOG-170 Geography of California																	
3168	3.0	32	0	2	0	1	5	1	4	5	8	6	0	0	0	9	Curran, Judd
Course Total		32	0	2	0	1	5	1	4	5	8	6	0	0	0	9	
Subject Total		511	3	29	11	10	67	28	28	113	89	121	6	0	0	297	
Division Total		511	3	29	11	10	67	28	28	113	89	121	6	0	0	297	

** = Not Valid for ADA -- Not included in totals

Grade Distribution by Division
School: Grossmont College -- Term: 2011SP -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOG-104 Intro to Geog Inform Sci--Gis																			
7644N		3.0	20	0	2	2	5	5	1	2	1	1	1	0	0	0	3	Curran, Judd	
Course Total			20	0	2	2	5	5	1	2	1	1	1	0	0	0	3		
GEOG-106 World Regional Geography																			
7645		3.0	27	0	2	0	2	1	1	3	7	2	9	0	0	0	13	Goodman, Mark	
8865N		3.0	33	0	5	0	0	8	0	0	11	4	5	0	0	0	17	Therkalsen, Scott	
9129		3.0	29	0	0	1	1	0	2	1	4	9	10	0	1	0	11	Goodman, Mark	
Course Total			89	0	7	1	3	9	3	4	22	15	24	0	1	0	41		
GEOG-120 Elements of Physical Geography																			
7646		3.0	18	0	1	1	2	2	2	0	4	2	4	0	0	0	13	Cliffe, Timothy	
7647		3.0	31	0	0	1	1	0	0	2	5	9	12	0	1	0	18	Goodman, Mark	
7648		3.0	30	0	1	0	2	3	3	1	9	2	7	1	1	0	20	Curran, Judd	
7649		3.0	24	0	0	3	2	2	0	1	3	7	6	0	0	0	23	Curran, Judd	
7650		3.0	31	0	1	0	2	3	2	2	11	1	9	0	0	0	21	Curran, Judd	
7651		3.0	36	0	0	0	2	2	4	3	9	3	9	1	3	0	15	Curran, Judd	
7652		3.0	27	0	5	0	0	7	0	0	5	2	5	3	0	0	24	Therkalsen, Scott	
7653N		3.0	33	0	3	2	3	4	1	1	6	8	4	1	0	0	8	Cliffe, Timothy	
8864		3.0	35	0	4	0	0	9	0	0	8	3	11	0	0	0	16	Therkalsen, Scott	
Course Total			265	0	15	7	14	32	12	10	60	37	67	6	5	0	158		
GEOG-121 Physical Geography Lab																			
7656		1.0	22	0	1	0	0	8	0	0	9	2	1	0	1	0	5	Blazic, Slobodan	PT
7657		1.0	21	0	6	0	0	7	0	0	6	0	1	1	0	0	0	Therkalsen, Scott	

7658		1.0	18	0	1	4	2	6	0	1	1	1	1	1	0	0	4	Goodman, Mark	
Course Total			61	0	8	4	2	21	0	1	16	3	3	2	1	0	9		
GEOG-130 Human & Cultural Geography																			
7659		3.0	23	0	0	1	1	3	2	1	6	2	7	0	0	0	5	Goodman, Mark	
7660		3.0	27	0	5	0	0	7	0	0	9	2	4	0	0	0	10	Therkalsen, Scott	XP
7661		3.0	31	0	4	0	0	9	0	0	8	4	6	0	0	0	10	Therkalsen, Scott	
Course Total			81	0	9	1	1	19	2	1	23	8	17	0	0	0	25		
GEOG-150 Field Study Nat Hist/San Diego																			
7664 **	8	3.0	10	1	1	1	3	3	1	0	0	0	0	0	0	0	2	Jacobson, Gary	
Course Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
GEOG-170 Geography of California																			
7665		3.0	30	0	1	2	0	4	3	1	4	4	10	1	0	0	8	Curran, Judd	
Course Total			30	0	1	2	0	4	3	1	4	4	10	1	0	0	8		
Subject Total			546	0	42	17	25	90	21	19	126	68	122	9	7	0	244		
Division Total			546	0	42	17	25	90	21	19	126	68	122	9	7	0	244		

** = Not Valid for ADA -- Not included in totals

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Grade Distribution by Division

School: Grossmont College -- Term: 2010FA -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOG-106 World Regional Geography																			
3150		3.0	23	0	3	0	0	8	0	0	6	1	5	0	0	0	16	Therkalsen, Scott	XP
5925		3.0	31	0	1	0	0	8	0	0	8	5	9	0	0	0	12	Therkalsen, Scott	
9538N		3.0	25	0	0	0	0	7	0	0	6	8	4	0	0	0	27	Therkalsen, Scott	
Course Total			79	0	4	0	0	23	0	0	20	14	18	0	0	0	55		
GEOG-120 Elements of Physical Geography																			
3151		3.0	44	2	1	2	1	2	1	1	14	0	20	0	0	0	10	Cliffe, Timothy	
3152		3.0	36	2	3	1	1	2	0	0	12	4	10	0	1	0	16	Cliffe, Timothy	
3153		3.0	43	0	1	1	1	5	2	2	9	4	17	1	0	0	13	Curran, Judd	
3154		3.0	38	0	0	0	2	3	3	1	11	5	13	0	0	0	13	Curran, Judd	
3155		3.0	30	0	2	0	1	1	2	2	8	4	10	0	0	0	22	Curran, Judd	
3156		3.0	36	2	1	0	1	1	3	6	7	3	11	1	0	0	16	Curran, Judd	
3157		3.0	39	1	2	1	2	2	2	4	14	2	6	2	1	0	14	Curran, Judd	
3158N		3.0	28	1	1	1	1	3	2	3	4	3	9	0	0	0	17	Cliffe, Timothy	
6008		3.0	30	0	3	0	0	4	0	0	7	4	10	1	1	0	20	Therkalsen, Scott	
Course Total			324	8	14	6	10	23	15	19	86	29	106	5	3	0	141		
GEOG-121 Physical Geography Lab																			
3159		1.0	24	0	2	4	2	3	4	3	3	1	2	0	0	0	7	Curran, Judd	
3160		1.0	14	0	3	0	0	5	0	0	3	0	2	1	0	0	2	Blazic, Slobodan	PT
3161		1.0	20	0	4	0	0	6	0	0	8	0	1	1	0	0	2	Therkalsen, Scott	
Course Total			58	0	9	4	2	14	4	3	14	1	5	2	0	0	11		

GEOG-130 Human & Cultural Geography																	
3164	3.0	30	0	6	0	0	7	0	0	8	6	3	0	0	0	8	Therkalsen, Scott
3165	3.0	33	0	5	0	0	9	0	0	10	4	5	0	0	0	11	Therkalsen, Scott
Course Total		63	0	11	0	0	16	0	0	18	10	8	0	0	0	19	
GEOG-140 Introduction to Meteorology																	
3167	3.0	24	1	0	3	2	2	5	0	3	3	5	0	0	0	16	Cliffe, Timothy
Course Total		24	1	0	3	2	2	5	0	3	3	5	0	0	0	16	
GEOG-170 Geography of California																	
3168	3.0	39	0	1	0	3	5	3	2	7	7	10	0	0	0	15	Curran, Judd
Course Total		39	0	1	0	3	5	3	2	7	7	10	0	0	0	15	
Subject Total		587	9	39	13	17	83	27	24	148	64	152	7	3	0	257	
Division Total		587	9	39	13	17	83	27	24	148	64	152	7	3	0	257	

Grade Distribution by Division

School: Grossmont College -- Term: 2010SP -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOG-104 Intro to Geog Inform Sci--Gis																			
7644N		3.0	25	5	4	2	3	2	5	1	1	1	1	0	0	0	6	Curran, Judd	
Course Total			25	5	4	2	3	2	5	1	1	1	1	0	0	0	6		
GEOG-106 World Regional Geography																			
7645		3.0	44	0	0	2	1	3	0	1	16	4	16	0	1	0	12	Goodman, Mark	
8865N		3.0	25	0	6	0	0	4	0	0	9	4	2	0	0	0	23	Therkalsen, Scott	
9129		3.0	28	0	0	2	0	4	2	3	5	3	9	0	0	0	16	Goodman, Mark	
Course Total			97	0	6	4	1	11	2	4	30	11	27	0	1	0	51		
GEOG-120 Elements of Physical Geography																			
7646		3.0	25	0	1	0	3	0	2	0	7	5	6	1	0	0	8	Cliffe, Timothy	
7647		3.0	32	0	0	0	0	3	1	2	6	8	12	0	0	0	16	Goodman, Mark	
7648		3.0	37	0	1	1	0	2	1	1	10	6	15	0	0	0	12	Curran, Judd	XP
7649		3.0	34	0	0	1	0	0	6	2	9	5	9	1	1	0	15	Curran, Judd	
7650		3.0	36	0	2	1	1	3	1	3	8	4	13	0	0	0	16	Cliffe, Timothy	
7651		3.0	27	0	1	0	0	3	1	2	4	3	11	2	0	0	21	Curran, Judd	
7652		3.0	36	0	4	0	0	7	0	0	7	4	11	3	0	0	18	Therkalsen, Scott	
7653N		3.0	33	2	4	2	2	1	1	1	5	1	13	1	0	0	8	Cliffe, Timothy	
8864		3.0	39	0	5	0	0	2	0	0	9	7	13	2	1	0	14	Therkalsen, Scott	
Course Total			299	2	18	5	6	21	13	11	65	43	103	10	2	0	128		
GEOG-121 Physical Geography Lab																			
7656		1.0	19	0	0	0	0	8	0	0	5	4	1	1	0	0	8	Blazic, Slobodan	PT
7657		1.0	24	0	1	3	2	6	0	1	5	2	2	2	0	0	4	Curran, Judd	

7658N		1.0	23	0	3	0	0	8	0	0	11	0	1	0	0	0	5	Blazic, Slobodan	PT
Course Total			66	0	4	3	2	22	0	1	21	6	4	3	0	0	17		
GEOG-130 Human & Cultural Geography																			
7659		3.0	31	0	0	1	1	0	2	3	2	6	15	0	0	0	13	Goodman, Mark	
7660		3.0	27	0	4	0	0	5	0	0	8	1	9	0	0	0	11	Therkalsen, Scott	
7661		3.0	32	0	4	0	0	13	0	0	4	6	5	0	0	0	8	Therkalsen, Scott	
Course Total			90	0	8	1	1	18	2	3	14	13	29	0	0	0	32		
GEOG-150 Field Study Nat Hist/San Diego																			
7664 **	8	3.0	9	0	4	0	1	0	2	0	1	0	0	1	0	0	3	Jacobson, Gary	
Course Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
GEOG-170 Geography of California																			
7665		3.0	27	0	0	0	0	4	3	2	6	4	8	0	0	0	9	Curran, Judd	
Course Total			27	0	0	0	0	4	3	2	6	4	8	0	0	0	9		
GEOG-199 Special Studies/Projects GEOG																			
5299 **	8	1.0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	Goodman, Mark	
Course Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Subject Total			604	7	40	15	13	78	25	22	137	78	172	13	3	0	243		
Division Total			604	7	40	15	13	78	25	22	137	78	172	13	3	0	243		

Printed on: 9/06/2012

** = Not Valid for ADA -- Not included in totals

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Grade Distribution by Division

School: Grossmont College -- Term: 2009FA -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOG-106 World Regional Geography																			
3150		3.0	33	1	2	1	0	3	4	2	5	3	12	0	0	0	12	Goodman, Mark	
5925N		3.0	29	0	5	0	0	11	0	0	7	0	6	0	0	0	10	Therkalsen, Scott	
9538		3.0	44	0	0	2	0	0	4	2	10	6	20	0	0	0	7	Goodman, Mark	
Course Total			106	1	7	3	0	14	8	4	22	9	38	0	0	0	29		
GEOG-120 Elements of Physical Geography																			
3151		3.0	39	1	2	1	1	2	2	2	5	9	14	0	0	0	11	Cliffe, Timothy	
3152		3.0	29	0	0	1	0	2	1	1	10	4	10	0	0	0	20	Curran, Judd	
3153		3.0	35	0	0	0	1	2	3	1	5	3	20	0	0	0	15	Goodman, Mark	
3154		3.0	34	2	1	1	3	2	5	0	5	0	15	0	0	0	11	Cliffe, Timothy	
3155		3.0	37	0	2	0	0	3	2	3	9	10	8	0	0	0	16	Curran, Judd	XP
3156		3.0	17	0	1	0	1	1	4	2	1	1	6	0	0	0	29	Curran, Judd	
3157		3.0	26	0	0	1	1	2	0	2	8	4	8	0	0	0	22	Curran, Judd	
3158N		3.0	24	1	1	2	1	3	0	0	6	3	3	2	1	0	13	Cliffe, Timothy	
6008		3.0	36	0	3	0	0	13	0	0	8	4	8	0	0	0	10	Therkalsen, Scott	
Course Total			277	4	10	6	8	30	17	11	57	38	92	2	1	0	147		
GEOG-121 Physical Geography Lab																			
3159		1.0	18	0	5	0	0	3	0	0	6	2	2	0	0	0	2	Therkalsen, Scott	
3160		1.0	11	0	2	0	0	4	0	0	2	0	3	0	0	0	6	Blazic, Slobodan	PT
3161		1.0	20	0	5	0	0	12	0	0	0	0	1	1	0	0	2	Therkalsen, Scott	
Course Total			49	0	12	0	0	19	0	0	8	2	6	1	0	0	10		

GEOG-130 Human & Cultural Geography																	
3163	3.0	23	0	1	0	0	0	4	1	4	3	9	0	0	0	7	Goodman, Mark
3164	3.0	30	0	0	0	2	2	5	1	3	4	13	0	0	0	15	Goodman, Mark
3165	3.0	34	0	6	0	0	10	0	0	8	5	5	0	0	0	5	Therkalsen, Scott
Course Total		87	0	7	0	2	12	9	2	15	12	27	0	0	0	27	
GEOG-140 Introduction to Meteorology																	
3167	3.0	12	0	1	0	0	0	3	0	4	3	1	0	0	0	1	Cliffe, Timothy
Course Total		12	0	1	0	0	0	3	0	4	3	1	0	0	0	1	
GEOG-170 Geography of California																	
3168	3.0	34	0	1	2	1	1	2	3	8	8	8	0	0	0	11	Curran, Judd
Course Total		34	0	1	2	1	1	2	3	8	8	8	0	0	0	11	
Subject Total		565	5	38	11	11	76	39	20	114	72	172	3	1	0	225	
Division Total		565	5	38	11	11	76	39	20	114	72	172	3	1	0	225	

** = Not Valid for ADA -- Not included in totals

Grade Distribution by Division

School: Grossmont College -- Term: 2009SP -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOG-104 Intro to Geog Inform Sci--Gis																			
7644N		3.0	11	0	3	0	0	2	0	0	3	2	1	0	0	0	2	Curran, Judd	XP
Course Total			11	0	3	0	0	2	0	0	3	2	1	0	0	0	2		
GEOG-106 World Regional Geography																			
7645		3.0	36	0	1	0	0	10	0	0	10	4	11	0	0	0	7	Goodman, Mark	
8865N		3.0	21	0	4	0	0	5	0	0	3	0	9	0	0	0	10	Therkalsen, Scott	PT
9129		3.0	34	0	3	0	0	11	0	0	11	2	7	0	0	0	9	Goodman, Mark	
Course Total			91	0	8	0	0	26	0	0	24	6	27	0	0	0	26		
GEOG-120 Elements of Physical Geography																			
7646		3.0	18	0	3	0	0	5	0	0	3	3	3	1	0	0	2	Cliffe, Timothy	
7647		3.0	35	0	0	0	0	3	0	0	4	5	20	0	2	0	10	Goodman, Mark	
7648		3.0	42	0	2	0	0	5	0	0	8	12	12	0	2	0	9	Therkalsen, Scott	PT
7649		3.0	37	0	1	0	0	5	0	0	15	8	7	0	1	0	11	Curran, Judd	
7650		3.0	22	0	0	0	0	5	0	0	7	2	6	2	0	0	16	Curran, Judd	
7651		3.0	37	0	4	0	0	4	0	0	11	3	11	4	0	0	3	Therkalsen, Scott	PT
7652		3.0	22	0	1	0	0	3	0	0	7	1	9	1	0	0	10	Curran, Judd	
7653N		3.0	21	0	4	0	0	4	0	0	9	1	3	0	0	0	9	Cliffe, Timothy	
8864		3.0	36	0	0	0	0	4	0	0	16	3	12	0	1	0	8	Therkalsen, Scott	PT
Course Total			270	0	15	0	0	38	0	0	80	38	83	8	6	0	78		
GEOG-121 Physical Geography Lab																			
7655		1.0	12	0	4	0	0	1	0	0	2	1	1	3	0	0	2	Goodman, Mark	
7656		1.0	20	0	3	0	0	7	0	0	7	1	0	2	0	0	5	Blazic, Slobodan	PT

7657		1.0	20	0	5	0	0	9	0	0	3	2	1	0	0	0	5	Curran, Judd	
7658N		1.0	12	0	2	0	0	6	0	0	2	0	0	2	0	0	0	Blazic, Slobodan	PT
Course Total			64	0	14	0	0	23	0	0	14	4	2	7	0	0	12		
GEOG-130 Human & Cultural Geography																			
7659		3.0	18	0	1	0	0	1	0	0	6	2	7	0	1	0	8	Goodman, Mark	
7660		3.0	16	0	1	0	0	4	0	0	7	0	4	0	0	0	4	Goodman, Mark	
7661		3.0	36	0	5	0	0	11	0	0	8	4	8	0	0	0	7	Therkalsen, Scott	PT
Course Total			70	0	7	0	0	16	0	0	21	6	19	0	1	0	19		
GEOG-140 Introduction to Meteorology																			
7663		3.0	12	0	3	0	0	4	0	0	2	1	2	0	0	0	1	Cliffe, Timothy	
Course Total			12	0	3	0	0	4	0	0	2	1	2	0	0	0	1		
GEOG-150 Field Study Nat Hist/San Diego																			
7664	8	3.0	5	0	1	0	0	2	0	0	1	0	1	0	0	0	2	Jacobson, Gary	
Course Total			5	0	1	0	0	2	0	0	1	0	1	0	0	0	2		
GEOG-170 Geography of California																			
7665		3.0	28	0	3	0	0	4	0	0	11	3	6	0	1	0	2	Curran, Judd	
Course Total			28	0	3	0	0	4	0	0	11	3	6	0	1	0	2		
Subject Total			551	0	54	0	0	115	0	0	156	60	141	15	8	0	142		
Division Total			551	0	54	0	0	115	0	0	156	60	141	15	8	0	142		

Grade Distribution by Division

School: Grossmont College -- Term: 2008FA -- Division: All Divisions -- Subject: %GEOG -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOG-106 World Regional Geography																			
3150		3.0	31	0	3	0	0	6	0	0	12	3	6	1	0	0	14	Goodman, Mark	
5925N		3.0	28	0	3	0	0	10	0	0	6	2	7	0	0	0	17	Therkalsen, Scott	
Course Total			59	0	6	0	0	16	0	0	18	5	13	1	0	0	31		
GEOG-120 Elements of Physical Geography																			
3151		3.0	17	0	2	0	0	1	0	0	2	1	11	0	0	0	3	Mason, John	PT
3152		3.0	32	0	4	0	0	3	0	0	12	3	10	0	0	0	13	Curran, Judd	
3153		3.0	39	0	2	0	0	7	0	0	9	5	15	1	0	0	10	Therkalsen, Scott	
3154		3.0	33	0	3	0	0	4	0	0	12	6	8	0	0	0	18	Curran, Judd	
3155		3.0	28	0	1	0	0	5	0	0	4	5	12	0	1	0	12	Goodman, Mark	
3156		3.0	18	0	1	0	0	2	0	0	7	2	4	1	1	0	15	Curran, Judd	
3157		3.0	26	0	0	0	0	1	0	0	8	3	11	0	3	0	8	Goodman, Mark	
3158N		3.0	21	0	3	0	0	5	0	0	3	3	5	2	0	0	12	Therkalsen, Scott	
6008		3.0	28	0	3	0	0	7	0	0	11	0	4	3	0	0	9	Therkalsen, Scott	
Course Total			242	0	19	0	0	35	0	0	68	28	80	7	5	0	100		
GEOG-121 Physical Geography Lab																			
3159		1.0	10	0	2	0	0	2	0	0	4	2	0	0	0	0	3	Goodman, Mark	
3160		1.0	19	0	2	0	0	7	0	0	7	1	1	1	0	0	2	Curran, Judd	XP
3161		1.0	20	0	9	0	0	5	0	0	6	0	0	0	0	0	2	Therkalsen, Scott	XP
3162N		1.0	11	0	1	0	0	6	0	0	4	0	0	0	0	0	2	Blazic, Slobodan	PT
Course Total			60	0	14	0	0	20	0	0	21	3	1	1	0	0	9		

Printed on: 9/06/2012

** = Not Valid for ADA -- Not included in totals

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GEOG-130 Human & Cultural Geography																		
3163	3.0	18	0	1	0	0	1	0	0	8	4	4	0	0	0	2	Goodman, Mark	
3164	3.0	19	0	2	0	0	2	0	0	3	4	8	0	0	0	2	Goodman, Mark	
3165	3.0	25	0	5	0	0	4	0	0	7	3	6	0	0	0	8	Therkalsen, Scott	
Course Total		62	0	8	0	0	7	0	0	18	11	18	0	0	0	12		
GEOG-140 Introduction to Meteorology																		
3167	3.0	9	0	3	0	0	6	0	0	0	0	0	0	0	0	0	Mason, John	PT
Course Total		9	0	3	0	0	6	0	0	0	0	0	0	0	0	0		
GEOG-170 Geography of California																		
3168	3.0	21	0	2	0	0	6	0	0	6	3	4	0	0	0	6	Curran, Judd	
Course Total		21	0	2	0	0	6	0	0	6	3	4	0	0	0	6		
Subject Total		453	0	52	0	0	90	0	0	131	50	116	9	5	0	158		
Division Total		453	0	52	0	0	90	0	0	131	50	116	9	5	0	158		

MATHEMATICS, NATURAL SCIENCES & PE

MATHEMATICS, NATURAL SCIENCES & PE

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
GEOG 104 INTRO TO GEOG INFORM SCI--GIS															
5605N		5.0	1	3	3	1						8	40.0	CURRAN	
COURSE TOTAL			1	3	3	1						8	40.0		
GEOG 106 WORLD REGIONAL GEOGRAPHY															
5606		3.0	2	9	18	3	8	1			11	52	156.0	GOODMAN	XP
COURSE TOTAL			2	9	18	3	8	1			11	52	156.0		
GEOG 120 ELEMENTS OF PHYSICAL GEOGRAPHY															
5610		3.0	6	12	15	1	2		1		5	42	126.0	MASON	PT
5615		3.0		6	11	3	13				15	48	141.0	THERKALSEN	
5616		3.0	3	4	12	7	6		1	2	19	54	162.0	CURRAN	
5618		3.0	2	9	9	5	10				15	50	150.0	GOODMAN	
5619		3.0	2	5	5	3	8		1		26	50	147.0	CURRAN	XP
5620		3.0	1	6	5	5	19				14	50	150.0	GOODMAN	XP
5622		3.0	3	3	5	1	3				7	22	66.0	THERKALSEN	
5624N		3.0		4	4		2		1		6	17	51.0	THERKALSEN	
5626N		3.0	6	5	3		3				10	27	78.0	THERKALSEN	XP
COURSE TOTAL			23	54	69	25	66		4	2	117	360	1071.0		
GEOG 121 PHYSICAL GEOGRAPHY LAB															
5628		3.0	2	6	5	1	1				5	20	60.0	GOODMAN	
5630		3.0	6	8	7	2	2		3		6	34	102.0	CURRAN	XP
5631		3.0		9	5	3	1		2			20	60.0	THERKALSEN	XP
5633N		3.0	3		9		1			1	9	23	66.0	BLAZIC	PT
COURSE TOTAL			11	23	26	6	5		5	1	20	97	288.0		
GEOG 130 HUMAN & CULTURAL GEOGRAPHY															
5638		3.0		5	5	3					6	19	57.0	GOODMAN	
5639		3.0	2	5	4	8	6				9	34	102.0	GOODMAN	
5640		3.0	1	4	7	4	2				9	27	81.0	THERKALSEN	
5641N		3.0	1	4	3		2				3	13	39.0	THERKALSEN	
COURSE TOTAL			4	18	19	15	10				27	93	279.0		
GEOG 140 INTRODUCTION TO METEOROLOGY															
5643		3.0		5	5	1	1				4	16	48.0	MASON	PT
COURSE TOTAL				5	5	1	1				4	16	48.0		
GEOG 150 FIELD STUDY NAT HIST/SAN DIEGO															
5645	8	10.0	3	2	1			1			3	10	32.0	HILL	
COURSE TOTAL			3	2	1			1			3	10	32.0		
GEOG 170 GEOGRAPHY OF CALIFORNIA															
5648		3.0	5	3	4	3	7				3	25	75.0	CURRAN	
COURSE TOTAL			5	3	4	3	7				3	25	75.0		
SUBJECT TOTAL			49	117	145	54	97	2	9	3	185	661	1989.0		

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
GEOG 106 WORLD REGIONAL GEOGRAPHY															
5398		3.0	4	15	13	6	6		1		5	50	147.0	CURRAN	
COURSE TOTAL			4	15	13	6	6		1		5	50	147.0		
GEOG 120 ELEMENTS OF PHYSICAL GEOGRAPHY															
5401		3.0	1	4	8	3	5		1		7	29	87.0	CURRAN	
5403		3.0	1	5	9	8	16				10	49	147.0	THERKALSEN	XP
5404		3.0	2	5	8	6	10		1		13	45	135.0	THERKALSEN	XP
5405		3.0	2	1	12	4	10				11	40	117.0	THERKALSEN	
5406		3.0	2	7	14	8	8				12	51	153.0	CURRAN	
5407		3.0	3	4	12	5	10		1	2	9	46	138.0	CURRAN	
5409		3.0	2	3	9	3	12			1	11	41	120.0	THERKALSEN	
5412N		3.0	1	2	5	2	5				8	23	69.0	THERKALSEN	
COURSE TOTAL			14	31	77	39	76		3	3	81	324	966.0		
GEOG 121 PHYSICAL GEOGRAPHY LAB															
5415		3.0	1	4	3						2	10	30.0	RIZZO	PT
5416		3.0	9	8	7	2	1				2	29	87.0	CURRAN	XP
5417		3.0	4	2	7	1			1		4	19	57.0	THERKALSEN	
5418N		3.0	4	2		3	1				3	13	39.0	THERKALSEN	
COURSE TOTAL			18	16	17	6	2		1		11	71	213.0		
GEOG 130 HUMAN & CULTURAL GEOGRAPHY															
5422		3.0	2	6	11	2	2				4	27	81.0	MASON	PT
5423		3.0	2	3	12	2	4				10	33	99.0	MASON	PT
5424		3.0	7	6	6	1	1				1	22	66.0	RIZZO	PT
5426N		3.0	3	4	2						2	11	33.0	RIZZO	PT
COURSE TOTAL			14	19	31	5	7				17	93	279.0		
GEOG 140 INTRODUCTION TO METEOROLOGY															
5428		3.0		1	4		2		2		4	13	39.0	MASON	PT
COURSE TOTAL				1	4		2		2		4	13	39.0		
GEOG 170 GEOGRAPHY OF CALIFORNIA															
5433		3.0	4		10	2	8			1	3	28	84.0	CURRAN	
COURSE TOTAL			4		10	2	8			1	3	28	84.0		
SUBJECT TOTAL			54	82	152	58	101		7	4	121	579	1728.0		

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
GEOG 106 WORLD REGIONAL GEOGRAPHY															
5606		3.0	3	8	11	9	15				6	52	156.0	GOODMAN	XP
COURSE TOTAL			3	8	11	9	15				6	52	156.0		
GEOG 120 ELEMENTS OF PHYSICAL GEOGRAPHY															
5610	16	3.0	1	4	10	8	2		3	1	15	44	79.5	MASON	PT
5611		3.0			2	2	4				7	15	45.0	CURRAN	
5615		3.0	2	4	8	7	8				17	46	138.0	CURRAN	
5616		3.0	1	4	11	4	4		1		19	44	132.0	CURRAN	
5618		3.0		9	6	8	16	1	1	2	8	51	153.0	GOODMAN	
5619		3.0	1	4	6	1	5				21	38	114.0	CURRAN	
5620		3.0	2	5	5	4	14				9	39	117.0	GOODMAN	
5624N		3.0	11	7	6	3	3				8	38	114.0	HAFER	PT
5626N		3.0	1	1	6		6				17	31	93.0	GOODMAN	
COURSE TOTAL			19	38	60	37	62	1	5	3	121	346	985.5		
GEOG 121 PHYSICAL GEOGRAPHY LAB															
5628		3.0	4	5	7				1		9	26	75.0	CURRAN	XP
5630		3.0	3	8	5	2	3				2	23	69.0	CURRAN	XP
5631		3.0	4	5	4							13	39.0	RIZZO	PT
5633N		3.0	4	4	10	2			2		4	26	78.0	THERKALSEN	PT
COURSE TOTAL			15	22	26	4	3		3		15	88	261.0		
GEOG 130 HUMAN & CULTURAL GEOGRAPHY															
5638		3.0	4	11	6	2	6				4	33	99.0	MASON	PT
5639		3.0		6	5		9				3	23	69.0	GOODMAN	
5640		3.0	5	4	8	2	1		1		2	23	69.0	HAFER	PT
5641N		3.0	2	5	1	2	1				3	14	42.0	GOODMAN	
COURSE TOTAL			11	26	20	6	17		1		12	93	279.0		
GEOG 140 INTRODUCTION TO METEOROLOGY															
5643		3.0	1	4	2	1	5				1	14	42.0	MASON	PT
COURSE TOTAL			1	4	2	1	5				1	14	42.0		
GEOG 150 FIELD STUDY NAT HIST/SAN DIEGO															
5645	8	10.0		1							1	2	4.6	HILL	
COURSE TOTAL				1							1	2	4.6		
GEOG 170 GEOGRAPHY OF CALIFORNIA															
5648		3.0	4	6	3	6	4		1		1	25	75.0	HAFER	PT
COURSE TOTAL			4	6	3	6	4		1		1	25	75.0		
GEOG 180 INTRO/GEOGRAPHIC INFO SYS--GIS															
5650N		3.0	6	4		1					1	12	36.0	CURRAN	
COURSE TOTAL			6	4		1					1	12	36.0		
SUBJECT TOTAL			59	109	122	64	106	1	10	3	158	632	1839.1		

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
GEOG 106 WORLD REGIONAL GEOGRAPHY															
5398		3.0	2	12	8	4	1			1	8	36	108.0	GOODMAN	
COURSE TOTAL			2	12	8	4	1			1	8	36	108.0		
GEOG 120 ELEMENTS OF PHYSICAL GEOGRAPHY															
5400		3.0		3	5	1	1				1	11	33.0	CURRAN	XP
5401		3.0	5	1	12	3	4			1	14	40	120.0	CURRAN	
5402		3.0	1	2	2	2	4				4	15	45.0	CURRAN	XP
5404		3.0	3	2	9	6	13		1		17	51	153.0	GOODMAN	
5405		3.0	3	6	9	2	6		1		24	51	153.0	CURRAN	
5406		3.0	5	10	6		6				12	39	117.0	MASON	PT
5407		3.0	2	3	4	3	9			2	14	37	111.0	CURRAN	
5409		3.0	1	6	8	7	10			1	19	52	156.0	CURRAN	XP
5412N		3.0	4	8	6	2	3				1	24	72.0	HAFER	PT
5414N		3.0	1	6	6	2	6				7	28	84.0	GOODMAN	
COURSE TOTAL			25	47	67	28	62		2	4	113	348	1044.0		
GEOG 121 PHYSICAL GEOGRAPHY LAB															
5415		3.0	4	10	7	2	1				3	27	81.0	CURRAN	
5416		3.0	5	11	3				2		6	27	78.0	CURRAN	
5417		3.0	7	4	1						3	15	45.0	RIZZO	PT
COURSE TOTAL			16	25	11	2	1		2		12	69	204.0		
GEOG 130 HUMAN & CULTURAL GEOGRAPHY															
5421		3.0		1	2		4				6	13	36.0	GOODMAN	
5422		3.0		4	4	3	4				8	23	69.0	GOODMAN	
5423		3.0	1	2	4		1				9	17	51.0	GOODMAN	
5424		3.0	5	5	9	3	2				3	27	78.0	HAFER	PT
5426N		3.0	1	5	4		4		1		5	20	60.0	MASON	PT
COURSE TOTAL			7	17	23	6	15		1		31	100	294.0		
GEOG 170 GEOGRAPHY OF CALIFORNIA															
5433		3.0	7	5	3	1					5	21	63.0	HAFER	PT
COURSE TOTAL			7	5	3	1					5	21	63.0		
SUBJECT TOTAL			57	106	112	41	79		5	5	169	574	1713.0		

Grade Distribution by Division

School: Grossmont College -- Term: 2012SP -- Division: All Divisions -- Subject: %OCEA -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
OCEA-112 Introduction to Oceanography																			
8268		3.0	38	3	2	0	3	7	0	4	6	1	11	0	1	0	15	Jacobson, Gary	
8270		3.0	43	5	6	1	0	6	2	0	6	5	11	0	1	0	9	Jacobson, Gary	
8273N		3.0	26	0	3	0	0	5	0	0	8	4	5	1	0	0	14	Yasuda, Memorie	PT
9954		3.0	29	0	2	1	0	7	0	2	7	4	3	2	1	0	22	Jacobson, Gary	
Course Total			136	8	13	2	3	25	2	6	27	14	30	3	3	0	60		
OCEA-113 Oceanography Laboratory																			
8274		1.0	23	0	4	0	0	8	0	0	1	5	2	2	1	0	4	Hill, Christi	
Course Total			23	0	4	0	0	8	0	0	1	5	2	2	1	0	4		
OCEA-150 Field Study Nat Hist/San Diego																			
8275	8	3.0	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0	Jacobson, Gary	
Course Total			2	0	0	0	0	0	1	0	0	0	0	1	0	0	0		
Subject Total			161	8	17	2	3	33	3	6	28	19	32	6	4	0	64		
Division Total			161	8	17	2	3	33	3	6	28	19	32	6	4	0	64		

** = Not Valid for ADA -- Not included in totals

Grade Distribution by Division

School: Grossmont College -- Term: 2011FA -- Division: All Divisions -- Subject: %OCEA -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
OCEA-112 Introduction to Oceanography																			
3764		3.0	45	3	2	2	4	3	2	1	16	5	7	0	0	0	12	Jacobson, Gary	
3765		3.0	49	0	2	0	0	13	0	0	12	11	7	0	1	0	7	Hill, Christi	
3767N		3.0	20	0	2	0	0	2	0	0	8	5	3	0	0	0	19	Yasuda, Memorie	PT
8530		3.0	38	1	1	0	5	4	3	1	7	7	9	0	0	0	17	Jacobson, Gary	
Course Total			152	4	7	2	9	22	5	2	43	28	26	0	1	0	55		
OCEA-113 Oceanography Laboratory																			
3768		1.0	31	0	4	0	0	16	0	0	8	0	3	0	0	0	4	Koningsor, Robert	PT
Course Total			31	0	4	0	0	16	0	0	8	0	3	0	0	0	4		
Subject Total			183	4	11	2	9	38	5	2	51	28	29	0	1	0	59		
Division Total			183	4	11	2	9	38	5	2	51	28	29	0	1	0	59		

Grade Distribution by Division

School: Grossmont College -- Term: 2011SP -- Division: All Divisions -- Subject: %OCEA -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
OCEA-112 Introduction to Oceanography																			
8268		3.0	30	0	5	0	0	9	0	1	4	4	7	0	0	0	12	Jacobson, Gary	
8269		3.0	26	0	3	0	1	3	0	1	4	4	9	0	1	0	16	Jacobson, Gary	
8270		3.0	38	1	8	0	1	8	0	0	10	2	8	0	0	0	9	Jacobson, Gary	
8271N		3.0	14	0	3	1	0	4	0	0	1	0	4	1	0	0	12	Jacobson, Gary	
8273N		3.0	21	0	1	0	0	3	0	0	8	3	4	2	0	0	14	Yasuda, Memorie	PT
9954		3.0	17	0	1	0	0	0	1	0	5	4	6	0	0	0	26	Duncan, Jennifer	PT
Course Total			146	1	21	1	2	27	1	2	32	17	38	3	1	0	89		
OCEA-113 Oceanography Laboratory																			
8274		1.0	27	0	15	0	0	8	0	0	3	1	0	0	0	0	6	Koningsor, Robert	PT
Course Total			27	0	15	0	0	8	0	0	3	1	0	0	0	0	6		
OCEA-150 Field Study Nat Hist/San Diego																			
8275 **	8	3.0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	Jacobson, Gary	
Course Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Subject Total			173	1	36	1	2	35	1	2	35	18	38	3	1	0	95		
Division Total			173	1	36	1	2	35	1	2	35	18	38	3	1	0	95		

** = Not Valid for ADA -- Not included in totals

Grade Distribution by Division
School: Grossmont College -- Term: 2010FA -- Division: All Divisions -- Subject: %OCEA -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
OCEA-112 Introduction to Oceanography																			
3764		3.0	44	1	3	7	1	5	6	1	8	4	7	0	1	0	9	Marso, Jaime	PT
3765		3.0	50	0	1	2	3	10	8	4	14	3	5	0	0	0	5	Sacramento Grilo, Isabelle	PT
3767N		3.0	24	0	2	0	0	3	0	0	10	3	6	0	0	0	20	Yasuda, Memorie	PT
Course Total			118	1	6	9	4	18	14	5	32	10	18	0	1	0	34		
OCEA-113 Oceanography Laboratory																			
3768		1.0	26	0	9	0	0	10	0	0	6	0	0	1	0	0	4	Koningsor, Robert	PT
Course Total			26	0	9	0	0	10	0	0	6	0	0	1	0	0	4		
Subject Total			144	1	15	9	4	28	14	5	38	10	18	1	1	0	38		
Division Total			144	1	15	9	4	28	14	5	38	10	18	1	1	0	38		

Grade Distribution by Division

School: Grossmont College -- Term: 2010SP -- Division: All Divisions -- Subject: %OCEA -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
OCEA-112 Introduction to Oceanography																			
8268		3.0	27	2	3	0	0	5	0	0	6	2	9	0	0	0	17	Jacobson, Gary	
8269		3.0	32	1	2	1	1	4	0	2	5	3	12	0	0	0	10	Jacobson, Gary	
8270		3.0	35	1	6	1	1	5	0	1	8	3	8	0	1	0	10	Jacobson, Gary	
8271		3.0	35	1	0	5	0	1	5	0	4	4	15	0	0	0	6	Marso, Jaime	PT
8273N		3.0	21	0	4	0	0	3	0	0	6	4	4	0	0	0	18	Yasuda, Memorie	PT
9954		3.0	40	0	0	2	0	3	0	2	10	9	14	0	0	0	3	Duncan, Jennifer	PT
Course Total			190	5	15	9	2	21	5	5	39	25	62	0	1	0	64		
OCEA-113 Oceanography Laboratory																			
8274		1.0	23	0	6	0	0	7	0	0	8	1	1	0	0	0	9	Koningsor, Robert	PT
Course Total			23	0	6	0	0	7	0	0	8	1	1	0	0	0	9		
OCEA-150 Field Study Nat Hist/San Diego																			
8275 **	8	3.0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	Jacobson, Gary	
Course Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Subject Total			213	5	21	9	2	28	5	5	47	26	63	0	1	0	73		
Division Total			213	5	21	9	2	28	5	5	47	26	63	0	1	0	73		

Grade Distribution by Division

School: Grossmont College -- Term: 2009FA -- Division: All Divisions -- Subject: %OCEA -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
OCEA-112 Introduction to Oceanography																			
3762		3.0	32	0	7	0	0	3	0	0	8	2	12	0	0	0	12	Jacobson, Gary	
3763		3.0	30	0	9	0	0	8	0	0	1	3	9	0	0	0	16	Jacobson, Gary	
3764		3.0	34	0	2	3	0	2	5	1	7	5	9	0	0	0	7	Marso, Jaime	PT
3765		3.0	35	0	4	1	3	7	2	0	13	3	2	0	0	0	10	Sacramento Grilo, Isabelle	PT
3767N		3.0	18	0	5	0	0	2	0	0	5	1	4	1	0	0	25	Yasuda, Memorie	PT
Course Total			149	0	27	4	3	22	7	1	34	14	36	1	0	0	70		
OCEA-113 Oceanography Laboratory																			
3768		1.0	19	0	3	0	0	12	0	0	3	1	0	0	0	0	7	Koningsor, Robert	PT
Course Total			19	0	3	0	0	12	0	0	3	1	0	0	0	0	7		
Subject Total			168	0	30	4	3	34	7	1	37	15	36	1	0	0	77		
Division Total			168	0	30	4	3	34	7	1	37	15	36	1	0	0	77		

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Grade Distribution by Division

School: Grossmont College -- Term: 2009SP -- Division: All Divisions -- Subject: %OCEA -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
OCEA-112 Introduction to Oceanography																			
8268		3.0	20	0	2	0	0	8	0	0	4	4	2	0	0	0	6	Williams, Robin	PT
8269		3.0	27	0	2	0	0	4	0	0	5	3	12	0	0	0	10	Jacobson, Gary	
8270		3.0	34	0	4	0	0	12	0	0	11	4	3	0	0	0	12	Williams, Robin	PT
8271		3.0	37	0	1	0	0	6	0	0	11	5	13	1	0	0	6	Marso, Jaime	PT
8273N		3.0	15	0	2	0	0	5	0	0	3	4	1	0	0	0	2	Yasuda, Memorie	PT
Course Total			133	0	11	0	0	35	0	0	34	20	31	1	0	0	36		
OCEA-113 Oceanography Laboratory																			
8274		1.0	24	0	12	0	0	7	0	0	5	0	0	0	0	0	5	Koningsor, Robert	PT
Course Total			24	0	12	0	0	7	0	0	5	0	0	0	0	0	5		
OCEA-150 Field Study Nat Hist/San Diego																			
8275	8	3.0	4	0	0	0	0	1	0	0	0	1	2	0	0	0	1	Jacobson, Gary	
Course Total			4	0	0	0	0	1	0	0	0	1	2	0	0	0	1		
Subject Total			161	0	23	0	0	43	0	0	39	21	33	1	0	0	42		
Division Total			161	0	23	0	0	43	0	0	39	21	33	1	0	0	42		

Grade Distribution by Division

School: Grossmont College -- Term: 2008FA -- Division: All Divisions -- Subject: %OCEA -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
OCEA-112 Introduction to Oceanography																			
3762		3.0	27	0	3	0	0	6	0	0	6	4	8	0	0	0	12	Jacobson, Gary	
3763		3.0	24	0	2	0	0	1	0	0	7	0	13	1	0	0	12	Jacobson, Gary	
3764		3.0	39	0	6	0	0	3	0	0	13	4	12	0	1	0	5	Marso, Jaime	PT
3765		3.0	39	0	2	0	0	12	0	0	14	3	8	0	0	0	7	Hill, Christi	
3766		3.0	10	0	1	0	0	3	0	0	3	1	2	0	0	0	5	Yasuda, Memorie	PT
3767N		3.0	22	0	5	0	0	6	0	0	5	2	3	0	1	0	7	Jacobson, Gary	
Course Total			161	0	19	0	0	31	0	0	48	14	46	1	2	0	48		
OCEA-113 Oceanography Laboratory																			
3768		1.0	14	0	3	0	0	3	0	0	4	0	3	1	0	0	8	Koningsor, Robert	PT
Course Total			14	0	3	0	0	3	0	0	4	0	3	1	0	0	8		
Subject Total			175	0	22	0	0	34	0	0	52	14	49	2	2	0	56		
Division Total			175	0	22	0	0	34	0	0	52	14	49	2	2	0	56		

MATHEMATICS, NATURAL SCIENCES & PE

MATHEMATICS, NATURAL SCIENCES & PE

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
OCEA 112 INTRODUCTION TO OCEANOGRAPHY															
6712		3.0	2	12	3		5		1		3	26	78.0	ZIRINO	PT
6713		3.0	2	1	4	3	7		1		10	28	81.0	JACOBSON	
6716		3.0	10	4	7		5				5	31	93.0	JACOBSON	
6718		3.0	2	7	11	3	1		1		3	28	84.0	MARSO	PT
6721		3.0	2	5	2	3					7	19	54.0	YASUDA	PT
6724N		3.0	4	2	4		1				8	19	57.0	JACOBSON	
COURSE TOTAL			22	31	31	9	19		3		36	151	447.0		
OCEA 113 OCEANOGRAPHY LABORATORY															
6726		3.0	6	7	8		1		2		3	27	81.0	KONINGSOR	PT
COURSE TOTAL			6	7	8		1		2		3	27	81.0		
OCEA 150 FIELD STUDY NAT HIST/SAN DIEGO															
6727	8	10.0	1	1							2	4	9.1	HILL	
COURSE TOTAL			1	1							2	4	9.1		
SUBJECT TOTAL			29	39	39	9	20		5		41	182	537.1		

MATHEMATICS, NATURAL SCIENCES & PE

MATHEMATICS, NATURAL SCIENCES & PE

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
OCEA 112 INTRODUCTION TO OCEANOGRAPHY															
6461		3.0	3	10	4	1	2		2		14	36	108.0	ZIRINO	PT
6462		3.0	4	4	5	1	8				10	32	96.0	JACOBSON	
6463		3.0	7	5	5	5	8				8	38	114.0	JACOBSON	
6464		3.0	6	10	6		1		1		13	37	108.0	ZIRINO	PT
6469		3.0		5	5	1	3				12	26	78.0	YASUDA	PT
6470N		3.0	2	5	2	2	1				15	27	75.0	JACOBSON	
COURSE TOTAL			22	39	27	10	23		3		72	196	579.0		
OCEA 113 OCEANOGRAPHY LABORATORY															
6472		3.0	6	14	3				1		4	28	84.0	KONINGSOR	PT
COURSE TOTAL			6	14	3				1		4	28	84.0		
SUBJECT TOTAL			28	53	30	10	23		4		76	224	663.0		

MATHEMATICS, NATURAL SCIENCES & PE

MATHEMATICS, NATURAL SCIENCES & PE

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
OCEA 112	INTRODUCTION TO OCEANOGRAPHY														
6712		3.0	8	8	11	4			3			34	102.0	FARQUHARSON	PT
6713		3.0		3	6	3	2		2	1	8	25	75.0	JACOBSON	
6716		3.0	8	17	6		1		2		2	36	108.0	FARQUHARSON	PT
6718		3.0	5	8	6	2	6				15	42	126.0	JACOBSON	
6721		3.0	1	2	1	2					8	14	39.0	YASUDA	PT
6724N		3.0	2	8	6						8	24	72.0	ZIRINO	PT
7765	4	12.0	3	5	6		2				2	18	43.9	ZIRINO	PT
COURSE TOTAL			27	51	42	11	11		7	1	43	193	565.9		
OCEA 113	OCEANOGRAPHY LABORATORY														
6725		3.0	4	18	1	1	1		2		3	30	90.0	HILL	
6726		3.0	6	11	5				3		6	31	93.0	KONINGSOR	PT
COURSE TOTAL			10	29	6	1	1		5		9	61	183.0		
OCEA 199	SPECIAL STUDIES/OCEANOGRAPHY														
6728		3.0	1									1	3.0	JACOBSON	
COURSE TOTAL			1									1	3.0		
SUBJECT TOTAL			38	80	48	12	12		12	1	52	255	751.9		

MATHEMATICS, NATURAL SCIENCES & PE

MATHEMATICS, NATURAL SCIENCES & PE

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
OCEA 112 INTRODUCTION TO OCEANOGRAPHY															
6461		3.0	20	6	8		1				1	36	108.0	FARQUHARSON	PT
6462		3.0	4	7	4	4	2		1		9	31	93.0	JACOBSON	
6463		3.0	28	9	1							38	114.0	FARQUHARSON	PT
6464		3.0	5	8	10	4	2		1		6	36	108.0	JACOBSON	
6469		3.0		1	10	3					6	20	60.0	YASUDA	PT
6470N		3.0	4	6	3		2				9	24	72.0	JACOBSON	
COURSE TOTAL			61	37	36	11	7		2		31	185	555.0		
OCEA 113 OCEANOGRAPHY LABORATORY															
6472		3.0	1	13	8				2		4	28	84.0	KONINGSOR	PT
COURSE TOTAL			1	13	8				2		4	28	84.0		
SUBJECT TOTAL			62	50	44	11	7		4		35	213	639.0		

Grade Distribution by Division

School: Grossmont College -- Term: 2012SP -- Division: All Divisions -- Subject: %GEOL -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOL-104 Earth Science																			
7666N		3.0	27	0	0	0	0	2	1	1	11	6	5	1	0	0	11	Duncan, Jennifer	PT
Course Total			27	0	0	0	0	2	1	1	11	6	5	1	0	0	11		
GEOL-110 Planet Earth																			
7667		3.0	36	1	4	0	3	7	1	1	9	2	8	0	0	0	16	Jacobson, Gary	
7670		3.0	30	3	2	0	3	3	0	0	7	2	10	0	0	0	18	Jacobson, Gary	
7671N		3.0	22	0	3	2	0	1	2	0	3	2	8	0	0	1	15	Cliffe, Timothy	
7672		3.0	42	0	3	0	0	9	0	0	16	5	9	0	0	0	11	Hill, Christi	
Course Total			130	4	12	2	6	20	3	1	35	11	35	0	0	1	60		
GEOL-111 Planet Earth Lab																			
7674N		1.0	18	2	3	0	1	9	0	0	2	1	0	0	0	0	5	Jacobson, Gary	
Course Total			18	2	3	0	1	9	0	0	2	1	0	0	0	0	5		
GEOL-121 Earth History																			
8910N		4.0	12	0	2	0	0	5	0	0	2	3	0	0	0	0	6	Hill, Christi	XP
Course Total			12	0	2	0	0	5	0	0	2	3	0	0	0	0	6		
GEOL-150 Field Study Nat Hist/San Diego																			
7676	8	3.0	7	0	2	3	1	1	0	0	0	0	0	0	0	0	1	Jacobson, Gary	
Course Total			7	0	2	3	1	1	0	0	0	0	0	0	0	0	1		
Subject Total			194	6	19	5	8	37	4	2	50	21	40	1	0	1	83		
Division Total			194	6	19	5	8	37	4	2	50	21	40	1	0	1	83		

Printed on: 9/06/2012

** = Not Valid for ADA -- Not included in totals

Grade Distribution by Division

School: Grossmont College -- Term: 2011FA -- Division: All Divisions -- Subject: %GEOL -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOL-104 Earth Science																			
3169N		3.0	31	0	0	0	1	7	1	0	11	6	5	0	0	0	18	Duncan, Jennifer	PT
Course Total			31	0	0	0	1	7	1	0	11	6	5	0	0	0	18		
GEOL-110 Planet Earth																			
3171		3.0	42	0	1	0	0	7	0	0	11	15	8	0	0	0	11	Hill, Christi	XP
3172		3.0	46	0	1	1	0	3	3	0	14	6	16	0	2	0	7	Jacobson, Gary	
3173		3.0	42	2	3	3	1	3	7	0	9	4	9	0	1	0	11	Jacobson, Gary	
3174N		3.0	35	1	4	3	2	3	3	0	10	4	5	0	0	0	14	Cliffe, Timothy	
Course Total			165	3	9	7	3	16	13	0	44	29	38	0	3	0	43		
GEOL-111 Planet Earth Laboratory																			
3177N		1.0	19	0	2	4	2	4	2	1	3	1	0	0	0	0	7	Jacobson, Gary	
8682		1.0	19	0	1	1	0	4	6	1	2	3	1	0	0	0	3	Jacobson, Gary	
Course Total			38	0	3	5	2	8	8	2	5	4	1	0	0	0	10		
GEOL-164 Southern CA Coastal Areas																			
8577	4	1.0	19	2	12	0	0	5	0	0	0	0	0	0	0	0	0	Jacobson, Gary	
Course Total			19	2	12	0	0	5	0	0	0	0	0	0	0	0	0		
Subject Total			253	5	24	12	6	36	22	2	60	39	44	0	3	0	71		
Division Total			253	5	24	12	6	36	22	2	60	39	44	0	3	0	71		

Grade Distribution by Division

School: Grossmont College -- Term: 2011SP -- Division: All Divisions -- Subject: %GEOL -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOL-104 Earth Science																			
7666		3.0	27	0	0	0	0	3	1	1	5	8	8	0	1	0	13	Duncan, Jennifer	PT
Course Total			27	0	0	0	0	3	1	1	5	8	8	0	1	0	13		
GEOL-110 Planet Earth																			
7667		3.0	37	0	6	3	0	4	1	0	9	3	10	1	0	0	14	Cliffe, Timothy	
7669		3.0	26	0	2	1	0	2	1	2	2	5	11	0	0	0	18	Marso, Jaime	PT
7670		3.0	25	0	0	0	0	6	1	1	3	6	8	0	0	0	24	Duncan, Jennifer	PT
7671N		3.0	21	0	0	2	0	3	0	1	5	2	8	0	0	0	18	Cliffe, Timothy	
7672		3.0	28	0	2	3	0	2	4	1	2	2	12	0	0	0	14	Marso, Jaime	PT
Course Total			137	0	10	9	0	17	7	5	21	18	49	1	0	0	88		
GEOL-111 Planet Earth Lab																			
7674N		1.0	25	0	4	0	0	8	5	0	5	1	2	0	0	0	7	Jacobson, Gary	
Course Total			25	0	4	0	0	8	5	0	5	1	2	0	0	0	7		
GEOL-150 Field Study Nat Hist/San Diego																			
7676 **	8	3.0	3	0	1	0	1	0	0	0	0	0	1	0	0	0	2	Jacobson, Gary	
Course Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
GEOL-220 Geology of the National Parks																			
6012		3.0	9	0	2	1	0	1	0	0	1	1	2	1	0	0	17	Jacobson, Gary	
Course Total			9	0	2	1	0	1	0	0	1	1	2	1	0	0	17		
Subject Total			198	0	16	10	0	29	13	6	32	28	61	2	1	0	125		
Division Total			198	0	16	10	0	29	13	6	32	28	61	2	1	0	125		

Printed on: 9/06/2012

** = Not Valid for ADA -- Not included in totals

Grade Distribution by Division

School: Grossmont College -- Term: 2010FA -- Division: All Divisions -- Subject: %GEOL -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOL-104 Earth Science																			
3169		3.0	44	0	0	0	0	4	2	2	13	7	16	0	0	0	11	Duncan, Jennifer	PT
5927N		3.0	33	0	1	0	0	7	0	0	11	7	6	1	0	0	13	Hill, Christi	XP
Course Total			77	0	1	0	0	11	2	2	24	14	22	1	0	0	24		
GEOL-110 Planet Earth																			
3171		3.0	40	1	5	6	2	1	5	3	6	7	3	0	1	0	7	Marso, Jaime	PT
3172		3.0	45	0	0	0	0	4	1	3	13	10	14	0	0	0	16	Duncan, Jennifer	PT
3173		3.0	51	0	1	0	1	1	1	1	7	16	23	0	0	0	3	Duncan, Jennifer	PT
3174N		3.0	29	0	3	2	0	2	2	3	4	4	8	0	1	0	7	Cliffe, Timothy	
3175		3.0	22	0	2	1	1	3	0	5	0	3	3	2	2	0	11	Marso, Jaime	PT
Course Total			187	1	11	9	4	11	9	15	30	40	51	2	4	0	44		
GEOL-111 Planet Earth Laboratory																			
3177N		1.0	21	0	3	0	0	6	0	0	5	0	5	2	0	0	10	Hill, Christi	XP
Course Total			21	0	3	0	0	6	0	0	5	0	5	2	0	0	10		
Subject Total			285	1	15	9	4	28	11	17	59	54	78	5	4	0	78		
Division Total			285	1	15	9	4	28	11	17	59	54	78	5	4	0	78		

Grade Distribution by Division
School: Grossmont College -- Term: 2010SP -- Division: All Divisions -- Subject: %GEOL -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOL-104 Earth Science																			
7666		3.0	39	0	0	1	1	5	3	2	11	5	9	0	2	0	9	Duncan, Jennifer	PT
Course Total			39	0	0	1	1	5	3	2	11	5	9	0	2	0	9		
GEOL-110 Planet Earth																			
7667		3.0	35	0	3	1	5	0	2	0	7	4	12	1	0	0	9	Cliffe, Timothy	
7669		3.0	41	2	2	1	1	2	6	3	4	1	19	0	0	0	10	Marso, Jaime	PT
7670		3.0	34	0	0	2	1	5	0	1	5	9	11	0	0	0	13	Duncan, Jennifer	PT
7671N		3.0	34	0	2	1	3	7	3	3	7	2	5	1	0	0	7	Cliffe, Timothy	
7672		3.0	20	0	0	1	1	0	4	2	2	1	8	1	0	0	13	Marso, Jaime	PT
Course Total			164	2	7	6	11	14	15	9	25	17	55	3	0	0	52		
GEOL-111 Planet Earth Lab																			
7674N		1.0	25	0	3	0	0	12	0	0	5	3	1	1	0	0	8	Jacobson, Gary	
Course Total			25	0	3	0	0	12	0	0	5	3	1	1	0	0	8		
GEOL-121 Earth History																			
9951N		4.0	13	0	7	0	0	5	0	0	1	0	0	0	0	0	0	Hill, Christi	
Course Total			13	0	7	0	0	5	0	0	1	0	0	0	0	0	0		
GEOL-150 Field Study Nat Hist/San Diego																			
7676 **	8	3.0	4	1	1	0	1	0	1	0	0	0	0	0	0	0	4	Jacobson, Gary	
Course Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Subject Total			241	2	17	7	12	36	18	11	42	25	65	4	2	0	69		
Division Total			241	2	17	7	12	36	18	11	42	25	65	4	2	0	69		

** = Not Valid for ADA -- Not included in totals

Grade Distribution by Division
School: Grossmont College -- Term: 2009FA -- Division: All Divisions -- Subject: %GEOL -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOL-104 Earth Science																			
3169		3.0	31	0	1	1	1	3	0	0	7	5	13	0	0	0	17	Duncan, Jennifer	PT
5927N		3.0	37	0	3	0	0	8	0	0	20	2	4	0	0	0	4	Hill, Christi	
Course Total			68	0	4	1	1	11	0	0	27	7	17	0	0	0	21		
GEOL-110 Planet Earth																			
3171		3.0	38	1	3	1	0	3	3	1	11	5	9	1	0	0	6	Marso, Jaime	PT
3172		3.0	37	0	0	0	0	2	3	1	5	12	13	0	0	0	10	Duncan, Jennifer	PT
3173		3.0	37	0	2	2	0	0	2	4	10	3	12	0	0	0	9	Duncan, Jennifer	PT
3174N		3.0	28	1	4	2	1	4	3	0	3	3	7	0	0	0	9	Cliffe, Timothy	
3175		3.0	31	0	2	3	1	4	2	0	7	2	9	1	0	0	13	Marso, Jaime	PT
Course Total			171	2	11	8	2	13	13	6	36	25	50	2	0	0	47		
GEOL-111 Planet Earth Laboratory																			
3176		1.0	13	0	4	0	0	2	0	0	4	0	2	0	0	0	3	Jacobson, Gary	
3177N		1.0	15	0	5	0	0	6	0	0	3	0	1	0	0	0	3	Jacobson, Gary	
Course Total			28	0	9	0	0	8	0	0	7	0	3	0	0	0	6		
GEOL-164 Southern CA Coastal Areas																			
9548	4	1.0	14	0	6	0	0	6	0	0	2	0	0	0	0	0	4	Jacobson, Gary	
Course Total			14	0	6	0	0	6	0	0	2	0	0	0	0	0	4		
Subject Total			281	2	30	9	3	38	13	6	72	32	70	2	0	0	78		
Division Total			281	2	30	9	3	38	13	6	72	32	70	2	0	0	78		

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** = Not Valid for ADA -- Not included in totals

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Grade Distribution by Division

School: Grossmont College -- Term: 2009SP -- Division: All Divisions -- Subject: %GEOL -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOL-104 Earth Science																			
7666		3.0	28	0	1	0	0	4	0	0	13	5	5	0	0	0	10	Duncan, Jennifer	PT
Course Total			28	0	1	0	0	4	0	0	13	5	5	0	0	0	10		
GEOL-110 Planet Earth																			
7667		3.0	22	0	3	0	0	4	0	0	3	5	7	0	0	0	12	Cliffe, Timothy	
7668		3.0	17	0	1	0	0	2	0	0	0	3	11	0	0	0	3	Duncan, Jennifer	PT
7669		3.0	26	0	7	0	0	5	0	0	5	3	5	1	0	0	5	Marso, Jaime	PT
7670		3.0	12	0	0	0	0	2	0	0	3	5	2	0	0	0	6	Duncan, Jennifer	PT
7671N		3.0	17	0	4	0	0	7	0	0	2	1	3	0	0	0	3	Cliffe, Timothy	
7672		3.0	18	0	2	0	0	8	0	0	4	0	4	0	0	0	24	Marso, Jaime	PT
Course Total			112	0	17	0	0	28	0	0	17	17	32	1	0	0	53		
GEOL-111 Planet Earth Lab																			
7673		1.0	11	0	2	0	0	9	0	0	0	0	0	0	0	0	1	Jacobson, Gary	
7674N		1.0	7	0	4	0	0	0	0	0	2	0	1	0	0	0	10	Jacobson, Gary	
Course Total			18	0	6	0	0	9	0	0	2	0	1	0	0	0	11		
GEOL-150 Field Study Nat Hist/San Diego																			
7676	8	3.0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	5	Jacobson, Gary	
Course Total			8	0	8	0	0	0	0	0	0	0	0	0	0	0	5		
GEOL-220 Geology of the National Parks																			
8867		3.0	10	0	3	0	0	1	0	0	2	1	2	1	0	0	14	Jacobson, Gary	
Course Total			10	0	3	0	0	1	0	0	2	1	2	1	0	0	14		
Subject Total			176	0	35	0	0	42	0	0	34	23	40	2	0	0	93		

Division Total	176	0	35	0	0	42	0	0	34	23	40	2	0	0	93

Grade Distribution by Division

School: Grossmont College -- Term: 2008FA -- Division: All Divisions -- Subject: %GEOL -- Course: All Courses

Section N = Night ** = Not Valid for ADA	S.T. Wks	Hrs	Enrollment	A+	A	A-	B+	B	B-	C+	C	D	F	Pass	NoPass	Inc	W	Instructor	
G06 -- Mathematics Natural Sciences Ex Sci																			
GEOL-104 Earth Science																			
3169		3.0	22	0	0	0	0	0	0	0	10	4	8	0	0	0	17	Duncan, Jennifer	PT
5927N		3.0	20	0	4	0	0	8	0	0	7	1	0	0	0	0	6	Hill, Christi	
Course Total			42	0	4	0	0	8	0	0	17	5	8	0	0	0	23		
GEOL-110 Planet Earth																			
3170		3.0	17	0	3	0	0	4	0	0	4	2	4	0	0	0	11	Jacobson, Gary	
3171		3.0	25	0	3	0	0	7	0	0	6	1	5	3	0	0	4	Marso, Jaime	PT
3172		3.0	13	0	1	0	0	0	0	0	5	0	7	0	0	0	3	Duncan, Jennifer	PT
3173		3.0	17	0	1	0	0	6	0	0	3	4	3	0	0	0	4	Duncan, Jennifer	PT
3174N		3.0	11	0	3	0	0	3	0	0	1	1	3	0	0	0	2	Van Winkle, Derral	PT
3175		3.0	30	0	3	0	0	7	0	0	8	4	8	0	0	0	12	Marso, Jaime	PT
Course Total			113	0	14	0	0	27	0	0	27	12	30	3	0	0	36		
GEOL-111 Planet Earth Laboratory																			
3176		1.0	15	0	4	0	0	3	0	0	5	1	1	1	0	0	3	Jacobson, Gary	
3177N		1.0	9	0	3	0	0	3	0	0	2	1	0	0	0	0	1	Van Winkle, Derral	PT
Course Total			24	0	7	0	0	6	0	0	7	2	1	1	0	0	4		
GEOL-162 Southern CA Mountain Areas																			
5926	3	1.0	16	0	14	0	0	2	0	0	0	0	0	0	0	0	0	Hill, Christi	XP
Course Total			16	0	14	0	0	2	0	0	0	0	0	0	0	0	0		
Subject Total			195	0	39	0	0	43	0	0	51	19	39	4	0	0	63		
Division Total			195	0	39	0	0	43	0	0	51	19	39	4	0	0	63		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
GEOL 104 EARTH SCIENCE															
5660		3.0		5	11	7	5		1		17	46	138.0	DUNCAN	PT
COURSE TOTAL				5	11	7	5		1		17	46	138.0		
GEOL 110 PLANET EARTH															
5662		3.0	2	5	4	3	6				8	28	84.0	JACOBSON	
5663		3.0		2	6	2	2			1	10	23	69.0	DUNCAN	PT
5664		3.0	5	4	4	4	4				10	31	93.0	JACOBSON	
5666		3.0	3	4	9	1	1				11	29	87.0	DUNCAN	PT
5668N		3.0	3	7	7	1	3		4		5	30	90.0	MARSO	PT
5670		3.0	2	2	10	4	8		1	1	18	46	135.0	MARSO	PT
COURSE TOTAL			15	24	40	15	24		5	2	62	187	558.0		
GEOL 111 PLANET EARTH LAB															
5673		3.0	4	4	6	1	1		3		6	25	75.0	JACOBSON	
5675N		3.0	4	7	4				1		3	19	54.0	VANWINKLE	PT
COURSE TOTAL			8	11	10	1	1		4		9	44	129.0		
GEOL 121 EARTH HISTORY															
5676N		6.0	1	3	2							6	36.0	HILL	XP
COURSE TOTAL			1	3	2							6	36.0		
GEOL 150 FIELD STUDY NAT HIST/SAN DIEGO															
5677	8	10.0	6									6	27.4	HILL	
COURSE TOTAL			6									6	27.4		
SUBJECT TOTAL			30	43	63	23	30		10	2	88	289	888.4		

	S.T. WKS HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
GEOL 104 EARTH SCIENCE														
5500	3.0	1	9	16	7	2				7	42	123.0	DUNCAN	PT
COURSE TOTAL		1	9	16	7	2				7	42	123.0		
GEOL 110 PLANET EARTH														
5504	3.0	2	4	2	6	6		1		9	30	90.0	JACOBSON	
5507	3.0	2	7	4	1	4				14	32	96.0	JACOBSON	
5508	3.0		3	5	3	3				6	20	57.0	DUNCAN	PT
5510	3.0	3	5	11	8	4				7	38	114.0	HILL	XP
5513N	3.0	7	6	9	1	1				2	26	78.0	MARSO	PT
5515	3.0	3	8	15	2	9				4	41	123.0	MARSO	PT
COURSE TOTAL		17	33	46	21	27		1		42	187	558.0		
GEOL 111 PLANET EARTH LABORATORY														
5518	3.0	3	12	6	3	2				3	29	87.0	JACOBSON	
5520N	3.0	2	6	2						2	12	36.0	VANWINKLE	PT
COURSE TOTAL		5	18	8	3	2				5	41	123.0		
GEOL 164 GEOLOGIC FIELD STUDIES														
5523	1.0	10						2		2	14	14.0	JACOBSON	
COURSE TOTAL		10						2		2	14	14.0		
GEOL 230 NATURAL DISASTERS														
5528N	3.0	2	1	1		2				1	7	21.0	VERDUGO	PT
COURSE TOTAL		2	1	1		2				1	7	21.0		
SUBJECT TOTAL		35	61	71	31	33		3		57	291	839.0		

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
GEOL 104 EARTH SCIENCE															
5500		3.0	4	9	17	4	6			1	5	46	138.0	HILL	
COURSE TOTAL			4	9	17	4	6			1	5	46	138.0		
GEOL 110 GENERAL GEOLOGY															
5504		3.0	3	4	7	4	4		1		11	34	102.0	HILL	
5507		3.0	3	3	8	2	2				4	22	66.0	JACOBSON	
5508		3.0	3	5	2	1	1				8	20	60.0	JACOBSON	
5510		3.0	10	5	5	3	2				5	30	90.0	MARSO	PT
5513N		3.0	7	6	5		4				3	25	75.0	MARSO	PT
5515N		3.0	2	3			4				5	14	42.0	VANWINKLE	PT
COURSE TOTAL			28	26	27	10	17		1		36	145	435.0		
GEOL 111 GENERAL GEOLOGY LAB															
5518		3.0	7	8	7		2				7	31	93.0	JACOBSON	
5520N		3.0	2	4		2					5	13	39.0	DUNCAN	PT
COURSE TOTAL			9	12	7	2	2				12	44	132.0		
GEOL 210 GEOLOGY OF CALIFORNIA															
5527N		3.0	3	4	4		2		1		4	18	54.0	HILL	XP
COURSE TOTAL			3	4	4		2		1		4	18	54.0		
SUBJECT TOTAL			44	51	55	16	27		2	1	57	253	759.0		

APPEDNIX 4 –

LONG TERM PLANNING GOALS

Section 3B - OTHER LONG-TERM PLANNING GOALS

1. Below, please list any DEPARTMENTAL program review recommendations and other long-term planning goals that you may be pursuing in addition to the recommendations listed in Section 3A.
2. Select the strategic plan goal number(s) and program review area(s) that best fits the listed goal.
3. List the strategies or activities that you plan to undertake to help achieve the goal. As you update the document each year, list when the activity starts and ends.
4. In the Outcomes column, you can keep track of your progress as you go with a bulleted list and then describe the overall outcome when the goal is completed.

		Program Review Area								
Planning Goal/ Department Recommendation	**Strategic Plan Goal #**	**Curriculum Development**	**Student Access and Success**	**Student Support and Campus Resources / Staffing**	**Community Outreach/Response**	**Faculty/Staff Professional Development**	**Strategy/Activity** (list the activities that you plan to undertake to help achieve the goal)	**When was strategy/activity started? [sem, year]**	**When was strategy/activity completed? [sem, year]**	**Achievement of your planning goal - progress and outcome(s)** (in this space, document your progress as you work on your activities and when your activites are complete, briefly describe the outcome)
Development of a Water Science and Geospatial Technology suite of courses within the Earth Science Dept, starting with development of a second-semester GIS course, and potentially culminating with development of an entire A.S. program or emphasis within the existing Earth Science program.	3,6,7, 8,9, 10		X		X		Conduct a feasibilty study which identifies the number of students potentially served by such a program and what kind of training those students need.	Spring 2010	on-hold	-Mark Goodman's Spring 2010 sabbatical in part looked into the feasability of developing a program that would produce hydrologic technicians. Due to the downturn in the economy, most agencies that hire hydro techs are not hiring. This fact, in conjunction with continued cuts to classes within the department has meant
							Submit new course outline(s) to curricullum committee.			
							Offer course(s).			
							Ask instuctors to contribute questions to an Earth Science test bank.			- done for select geology and oceanography sections

Planning Goal/ Department Recommendation	**Strategic Plan Goal #**	**Curriculum Development**	**Student Access and Success**	**Student Support and Campus Resources / Staffing**	**Community Outreach/Response**	**Faculty/Staff Professional Development**	**Strategy/Activity** (list the activities that you plan to undertake to help achieve the goal)	**When was strategy/activity started? [sem, year]**	**When was strategy/activity completed? [sem, year]**	**Achievement of your planning goal - progress and outcome(s)** (in this space, document your progress as you work on your activities and when your activites are complete, briefly describe the outcome)
Develop Blackboard-based practice exams with feedback.	3		X				TA's and/or BOT interns could help enter them into Blackboard.			
Secure appropriate work, office, and storage space in the refurbished 300N building as well as three lecture classrooms. All of these classrooms must hold a minimum of 55 students.	3,6,7, 11		X	X			Work closely with Tim Flood and GafCon to see that our needs are met.			- met lecture in refurbished Bldg 36, however, this did not meet the required specifications and is now being revisited in discussions of facilities related to Proposition V on the November 2012 ballot.
Offer staff development field trips that will explore water issues affecting our community.	10, 11					X	Plan and conduct water-awareness professional development field trips.	Fall 2008	ongoing	Professional development field trips revolving around the topics of water and energy continue to be developed and offered to the campus community during flex week. Examples include visits to the Imperial Irrigation District, Sonny Bono Salton Sea National Wildlife Refuge, Orange County

Planning Goal/ Department Recommendation	Strategic Plan Goal #	Curriculum Development	Student Access and Success	Student Support and Campus Resources / Staffing	Community Outreach/Response	Faculty/Staff Professional Development	**Strategy/Activity** (list the activities that you plan to undertake to help achieve the goal)	When was strategy/activity started? [sem, year]	When was strategy/activity completed? [sem, year]	**Achievement of your planning goal - progress and outcome(s)** (in this space, document your progress as you work on your activities and when your activites are complete, briefly describe the outcome)
Improve lab activities.	3	X	X				Develop computer-based lab activities. These include GIS and Google Earth tied exercises as well as stand-alone instructor-developed applications.	Fall 2009	Fall 2010,	- Developed computer-based contouring exercise. Revamped geologic history and strike and dip exercises to run in a browser. GIS lab activity has been developed and implemented in Physical Geography lab by Therkalsen and Curran. -Have Continued the process of improving the Geography Lab: (a) Restored Cliffe back into the lab program, now for a second semester, after 4 or 5 years of imposed exile so that he can resume contributing to lab
							we anticipate the need for a set of laptop computers for dedicated lab use at some time within the next six years.			
Enhance our field program	3	X	X				rotate 3-unit, week long courses on 5-year cycle			- this has already been in place with three of the courses, but we will be adding in the 4th (coastal california) in the near future. - Cliffe/Curran/Goodman developed an overnight Flex Trip in tandem with a paid, professional botanist for the purpose of enhancing the topic of oak speciation across SD Co ecosystems into ALL 4 Spring Field classes; this has enhanced the topical integration of the Geog
							develop an app for student and community use (sabbatical leave project)			
							Begin long term planning for a cultural geography field course.			
							offer the current course every semester			- department received annual funding for a lab kit through

Planning Goal/ Department Recommendation	Strategic Plan Goal #	Curriculum Development	Student Access and Success	Student Support and Campus Resources / Staffing	Community Outreach/Response	Faculty/Staff Professional Development	Strategy/Activity (list the activities that you plan to undertake to help achieve the goal)	When was strategy/activity started? [sem, year]	When was strategy/activity completed? [sem, year]	Achievement of your planning goal - progress and outcome(s) (in this space, document your progress as you work on your activities and when your activites are complete, briefly describe the outcome)
Enhance GIS coursework	3	X	X				develop and offer a second level course			Spring 2011, when the site license shifted to a campus-wide license with broader scope to include administrative/facilities use in addition to educational use. This will need to be renewed on a yearly basis, and is currently being
							maintain site license	Spr 2002	ongoing	
Offer continuing education opportunities for local teachers in the earth sciences.	2,9	X			X		investigate the need for teacher training courses in the earth sciences			
							check on the potential to offer courses through continuing ed			
Continue to develop and update curriculum	3	X					meet with SDSU geology on a regular basis.		ongoing	Discussed articulation of GEOL 150 and geology transfer model curriculum with SDSU geology department. Curran has been working with Palomar College to investigate the possibility of modifying Geog 104 curriculum to satisfy CSU GE requirements. - Cliffe has produced an explosion of lecture/application-based videos
							Revise existing GEOL 230 outline for articulation and convert curriculum to online format	Fall 2012		
							put in staffing request			- currently maintaining 0.20 LED

Planning Goal/ Department Recommendation	Strategic Plan Goal #	Curriculum Development	Student Access and Success	Student Support and Campus Resources / Staffing	Community Outreach/Response	Faculty/Staff Professional Development	Strategy/Activity (list the activities that you plan to undertake to help achieve the goal)	When was strategy/activity started? [sem, year]	When was strategy/activity completed? [sem, year]	Achievement of your planning goal - progress and outcome(s) (in this space, document your progress as you work on your activities and when your activites are complete, briefly describe the outcome)
Request a earth science technician.	6,11			X						per semester reassigned time until a lab technician can be hired.
Develop curriculum for an academically-based Cultural Geography Field Course to compliment and enhance the Cultural, World Regional, and California Geography program within the Earth Science Department. Social Science	1,3,4, 9	X					Investigate feasability.	Sp2011	ongoing	
Need installation of already-purchased table tops onto seats in rooms 353 and 354. For rooms 354 and 353, replace all seat-equipped-tables owing to table-tops that are not appropriate for either student notetaking or for student test-taking; problems include table tops that are (a)	3,6,7		X	X			Work with facilities.	Sp2011	ongoing	
Development of second-semester GIS course, originally proposed within the context of a Water Science and Geospatial Technology suite of courses within the Earth Science Dept,	9	X					Investigate feasability and funding sources	Sp2011	ongoing	

APPENDIX 5 – SLO ASSESSMENT ANALYSIS

ANNUAL SLO UPDATE (Assessment Report Fall 2010-Spring 2011)

Please fill out the form below on ALL Course-level SLOs you've assessed over the last 2 semesters. Please add additional rows if needed.

Course # and SLO wording (ex. Hist 108(SLO 1) – Students will be able to …)	**Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department drive or Blackboard site**	**Assessment Analysis: Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?**	**Course SLO Action Plan (please indicate how you will use these course assessment results and analysis for course improvement)**	**Semester when Next Assessment of this SLO will take place**	**Program Action Plan (please indicate how you will use your Course-level SLO data in making Program-level decisions/changes)**
GEOG 130	X Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Other (please describe):	**The 60% achievement threshold was reached. The assessment worked. Those who struggled in at least one area should a lack of prior preparation. Advice for future success may include requiring minimal prerequisites for entrance into college level courses.**	☐Conduct further assessment related to the issue and outcome **X** Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________ ☐Develop new methods of evaluating student work, such as: ____________ ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Other (please describe):	☐Fall OR **X** Spring Year: **2016**	☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Revise the course sequence or prerequisites **X** No program action will be taken ☐Other (please describe):
GEOG 106	X Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis)	**The 60% achievement threshold was reached. The assessment worked. Those who struggled in at least one area should a lack of prior preparation. Advice for future**	☐Conduct further assessment related to the issue and outcome **X** Conduct according to the schedule with no changes made to the assessment or	☐Fall OR **X** Spring Year: **2016**	☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________

	☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Other (please describe):	**success may include requiring minimal prerequisites for entrance into college level courses.**	SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: __________ ☐Develop new methods of evaluating student work, such as: __________ ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Other (please describe):		☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Revise the course sequence or prerequisites **X** No program action will be taken ☐Other (please describe):
	☐Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Other (please describe):		☐Conduct further assessment related to the issue and outcome ☐Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: __________ ☐Develop new methods of evaluating student work, such as: __________ ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO	☐Fall OR ☐Spring Year:	☐Plan purchase of new equipment or supplies needed for modified student activities, such as: __________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Revise the course sequence or prerequisites ☐No program action will be taken ☐Other (please describe):

			☐Other (please describe):		
	☐Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Other (please describe):		☐Conduct further assessment related to the issue and outcome ☐Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________ ☐Develop new methods of evaluating student work, such as: ____________ ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Other (please describe):	☐Fall OR ☐Spring Year:	☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Revise the course sequence or prerequisites ☐No program action will be taken ☐Other (please describe):

Six-Year SLO Plan can be found at:
http://www.grossmont.edu/student_learning_outcomes/SLO%20Spreadsheet%20home.htm

SLO Assessment
ANALYSIS
Appendix 5

ANNUAL SLO REPORT[1]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOG 121	GEOG 121
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	1) Develop observational skills related to "reading the landscape" (e.g., relating changes in solar declination to seasonal variation; relating changes in longitude to differences in time keeping; relating real-time weather observations to synoptic-scale weather maps; developing and using morphologic classification systems (e.g., mafic vs. felsic igneous rock classification; the biologic taxonomy; etc.); development of hypotheses derived from observation-based rationales; relating stream offsets, sagponds, and pressure ridges, as found on topographic maps, to lateral-fault location, and direction and rate of displacement; etc.).	2) Develop the ability to recognize and name the individual components of the physical environment, and of interrelationships between and spatial patterns produced by these individual components (e.g., recognition of dominant plant species within Coastal Sage Scrub biome; recognition of species variation by habitat (e.g., north vs. south facing slopes) within a biome; recognition of typical San Diego weather features and patterns (e.g., inversions, sea-breezes, downslope adiabatics, synoptic-scale Highs vs. synoptic-scale Lows vs. mesoscale Lows); etc.).
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):

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drive or Blackboard site		
Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses
Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________ ☐Develop new methods of evaluating student work, such as: ____________ ☐Plan purchase of new equipment or supplies needed for	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________ ☐Develop new methods of evaluating student work, such as: ____________ ☐Plan purchase of new equipment or supplies needed for

	modified student activities, such as: ____________________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):	modified student activities, such as: ____________________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):
Semester when Next Assessment of this SLO Outcome will take place	☐Fall OR ☒Spring Year: 2016	☐Fall OR ☒Spring Year: 2016

ANNUAL SLO REPORT[2]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOG 121	GEOG 121
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	3) Develop technical skills and experience utilizing the tools of Physical Geography to collect data (e.g., spherical grid systems; compasses and clinometers; GPS receivers; infrared guns; psychrometers and psychrometric tables; wading rods, pygmy meters, tag lines, shovels, and velocity-discharge ratings; etc.).	4) Develop technical skills used to analyze and interpret the data of Physical Geography (e.g., usage of the analemma, topographic maps, synoptic-scale weather maps, seismographs, hydrographs, etc.; application of conversion factors, trig functions, graphing, isoline mapping, topographic profiling, etc.).
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department drive or Blackboard site	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):

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Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses
Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________ ☐Develop new methods of evaluating student work, such as: ____________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________ ☐Make changes in staffing plans (i.e. modified job	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________ ☐Develop new methods of evaluating student work, such as: ____________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________ ☐Make changes in staffing plans (i.e. modified job

	descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):	descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):
Semester when Next Assessment of this SLO Outcome will take place	☐Fall OR ☒Spring Year: 2016	☐Fall OR ☒Spring Year: 2016

ANNUAL SLO REPORT[3]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOG 121
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	5) To illustrate the scientific method (e.g., hypothesis testing using the age of Hawaiian Island basalts relative to their distribution to predict direction and rate of plate motion; hypothesis testing using the temperature response of sand vs. water relative to radiation inputs to explain continentality; hypothesis testing of the temperature response of dark vs. light colored material relative to radiation inputs to account for natural selection of leaf structures present on Encelia farinosa vs. E. californica; etc.).
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department drive or	☐Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☒Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):

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Blackboard site	
Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?	Minimal prerequisites suggested for entrance into college-level courses
Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ______ ☐Develop new methods of evaluating student work, such as: ______ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as:

	☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):
Semester when Next Assessment of this SLO Outcome will take place	☐Fall OR ☒Spring Year: 2016

ANNUAL SLO REPORT[1]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOG 120	GEOG 120
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	1) Students should be able to memorize, apply, and explain the rationale behind **classification systems** developed for recognizing, explaining, and predicting relationships, patterns, and trends in Earth Systems (*e.g., classification of rocks; classification of thermal vs. dynamic weather systems; forms of energy, especially associated with the energy transformations produced by atmospheric, hydrospheric, biospheric, and lithospheric processes; classification of climates in terms of the availability of the inputs to photosynthesis; classification of biomes; classification of erosional vs. depositional environments; etc.*)	2) Students should be able to describe, apply, and explain the evidence behind the foundational scientific **models** commonly used to explain and predict relationships, patterns, and trends within Earth Systems (*e.g., Copernican Model describing Earth-Sun relationships; Kinetic Theory, such as applied to systems powered by differential heating; Dynamics, such as applied to the general circulation of the atmosphere; Thermodynamics, including the unique role of water within the Earth's Global Energy Budget, or the production of equilibrium landforms by the agents of gradation; Wave Cyclone theory; Plate Tectonic theory; etc.*).
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final

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should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department drive or Blackboard site	exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):
Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not,	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses

what needs to be revised?		
Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____ ☐Develop new methods of evaluating student work, such as: ____ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____ ☐Develop new methods of evaluating student work, such as: ____ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):
Semester when Next Assessment of this SLO Outcome will take place	☒Fall OR ☐Spring Year: 2015	☒Fall OR ☐Spring Year: 2015

ANNUAL SLO REPORT[2]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOG 120	GEOG 120
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	3) Students should be able to explain the step-by-step causes and outcomes of **thermal circulation** within the Earth System, including across various spatial and temporal scales (*e.g., Sea Breezes vs. Monsoonal Wind Systems vs. Hadley Cells; Plate Tectonics; etc.*).	4) Students should be able to discuss the unique characteristics and importance of **water** within the Earth System (*e.g., high capacity to store heat energy per change in temperature; high latent heat associated with phase changes; radiative properties relative to infrared radiation and greenhouse warming; energy source behind convective weather systems; systematic distribution of the mechanisms by which precipitation is produced; biome variation as an evolutionary response to the distribution of water resources; significance of evapotranspiration by plants to Earth's energy budget; role of water as a flux in producing magmas at subduction zones; role of water in producing clays and free ions through chemical weathering; gradational work performed by streams, waves, and glaciers producing erosional vs. depositional landforms; etc.*).
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs)	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs)

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assessment (rubrics, surveys, etc.) onto shared department drive or Blackboard site	☐Other (please describe):	☐Other (please describe):
Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses

Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ________ ☐Develop new methods of evaluating student work, such as: ________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ________ ☐Develop new methods of evaluating student work, such as: ________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):
Semester when Next Assessment of this SLO Outcome will take place	☒Fall OR ☐Spring Year: 2015	☒Fall OR ☐Spring Year: 2015

ANNUAL SLO REPORT[1]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOL 110	GEOL 110	GEOL 110
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	1) Explain the rock cycle and how it relates to the composition, texture, classification, and formative processes of geologic materials	2) Recognize the structural and textural relationships of a rock record, apply deductive reasoning, and formulate a scientifically valid interpretation of its history	3) Recognize and interpret the cause and effect relationship between observed geologic features and their formative geologic processes
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department drive or Blackboard site	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):

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Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses
Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: __________________ ☐Develop new methods of evaluating student work, such as: __________________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: __________________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: __________________ ☐Develop new methods of evaluating student work, such as: __________________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: __________________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: __________________ ☐Develop new methods of evaluating student work, such as: __________________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: __________________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or

	prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):	prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):	prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):
Semester when Next Assessment of this SLO Outcome will take place	☒Fall OR ☐Spring Year:2015	☒Fall OR ☐Spring Year:2015	☒Fall OR ☐Spring Year:2015

ANNUAL SLO REPORT[2]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOL 110
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	4) Explain the development of geologic hazards and resources and evaluate the interaction between humans and the geologic environment
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department drive or Blackboard site	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):

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Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?	Minimal prerequisites suggested for entrance into college-level courses
Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________________ ☐Develop new methods of evaluating student work, such as: ____________________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________________ ☐Make changes in staffing plans (i.e.

	modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):
Semester when Next Assessment of this SLO Outcome will take place	☒Fall OR ☐Spring Year:2015

ANNUAL SLO REPORT[1]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOL 111	GEOL 111	GEOL 111
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	1) Identify 80 common rock and mineral hand specimens	2) Demonstrate an ability to operate tools of geology to collect and/or analyze data	3) Use, interpret and analyze topographic and geologic maps
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department drive or Blackboard site	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):

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Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses
Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: __________ ☐Develop new methods of evaluating student work, such as: __________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: __________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: __________ ☐Develop new methods of evaluating student work, such as: __________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: __________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: __________ ☐Develop new methods of evaluating student work, such as: __________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: __________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development about best practices for this type of class/activity ☐Revise the course sequence or

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Semester when Next Assessment of this SLO Outcome will take place	☐Fall OR ☒Spring Year: 2016	☐Fall OR ☒Spring Year: 2016	☐Fall OR ☒Spring Year: 2016

ANNUAL SLO REPORT[2]—please fill out the below form on ALL Course-level SLOs you've assessed over the last 2 semesters.

Course #	GEOL 111	GEOL 111	GEOL 111
SLO Assessed (please cut and paste the wording of the SLO into the appropriate cell)	4) Arrange geologic events in order of occurrence given either geologic cross sections or maps	5) Construct topographic and geologic cross sections	6) Construct topographic maps from spot elevation data
Assessment Assignments and/or Instruments: Which were used to assess the SLO? (Department Chair should save any instruments used for assessment (rubrics, surveys, etc.) onto shared department drive or Blackboard site	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):	☒Item analysis of exams, quizzes, problem sets, etc. (items linked to specific outcomes) ☐Assignments based on rubrics (essays/reports, projects, performance analysis) ☐Assignments based on checklists ☐Direct Observation of performances, structured practices or drills, practical exams, small group work, etc. ☐Student Self-Assessments (reflective journals, surveys) ☐Classroom Assessment Techniques (CATS, "clicker" mediated responses, etc.) ☐Capstone projects of final summative assessment (final exams, capstone projects, portfolios, etc.) ☐Student Satisfaction Survey ☐Student/Administrative/ Instructional Service area Data Collection (for SSOs/ASOs/ISOs) ☐Other (please describe):

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Assessment Analysis (Please write a narrative on the following: What did you learn from the assessment of the outcomes? (i.e. In which areas did students excel? What issues and needs were revealed?) Did the assessment work, and if not, what needs to be revised?	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses	Minimal prerequisites suggested for entrance into college-level courses
Action Plan	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________________ ☐Develop new methods of evaluating student work, such as: ____________________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________________ ☐Develop new methods of evaluating student work, such as: ____________________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development	☐Conduct further assessment related to the issue and outcome ☒Conduct according to the schedule with no changes made to the assessment or SLO ☐Use new or revised teaching methods (i.e. more use of group work, new lecture, etc.), such as: ____________________ ☐Develop new methods of evaluating student work, such as: ____________________ ☐Plan purchase of new equipment or supplies needed for modified student activities, such as: ____________________ ☐Make changes in staffing plans (i.e. modified job descriptions, requests for new positions, etc.) ☐Engage in professional development

	development about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):	about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):	about best practices for this type of class/activity ☐Revise the course sequence or prerequisites ☐Revise the course syllabus or outline (i.e. change in course topics) ☐Revise the SLO ☐Unable to determine what should be done ☐Other (please describe):
Semester when Next Assessment of this SLO Outcome will take place	☐Fall OR ☒Spring Year: 2016	☐Fall OR ☒Spring Year: 2016	☐Fall OR ☒Spring Year: 2016

ASSESSMENT ANALYSIS REPORT 2008-09

Date: 9/9/9
Department: Earth Science
Name of Reporter: Gary Jacobson

Assessment Write-Up for: GEOL 110
(ex: HIST 108)

Semester Assessment was conducted: Spring 2009
(ex: Fall 2009)

What SLO(s) did you Assess *(include the Course SLO that you assessed and also the Benchmark you set for the expected % of Student Success)* :

Explain the rock cycle and how it relates to the composition, texture, classification, and formative processes of geologic materials.

The benchmark was set at 70%.

List of Instructors Involved:

Tim Cliffe			
Jaime Marso			
Jennifer Duncan			

Description of the Assessment Method *(include the assessment you used, any additional information regarding the assessment you think is important, and any calibration set-up or session information. ATTACH ANY ASSESSMENT TOOLS LIKE FINAL EXAM QUESTIONS, ETC., TO THIS DOCUMENT)*:

The following question was placed on the final exam:

A metamorphic rock is transformed into an igneous rock by
a. uplift, weathering, erosion, transportation, deposition and lithification
b. heat and/or pressure
c. heating, melting, cooling, and solidification
d. mechanical fragmentation and cementation
e. leaching and dehydration

ASSESSMENT ANALYSIS REPORT

Date of Department meeting on Analysis/Recommendations:[1] 8/18/09

Analysis of the Results *(for first-semester results, include any analytical data and discuss how the results compare to the benchmark set by your department; for second-semester and beyond results, include all analytical data and discuss how the results compare to previous results)*:

Approximately 95% of all GEOL 110 students taking the final exam answered the question correctly - greatly exceeding the 70% benchmark set by the department.

Recommendations for the next cycle of this assessment *(if you recommended no changes, please state why; if you recommended changes to the assessment tool, please explain why)*:

Although we realize that the amount of learning covered by this SLO is too broad in scope to be covered by a single assessment, we nonetheless have department consensus that this assessment question is a valid tool for assessing one component of the SLO across multiple sections. We therefore recommend no changes in this assessment for the next cycle.

What is the date that this assessment will be conducted next?:

Fall 2015

[1] The department SLO Coordinator should meet with other department members to discuss the assessment, analyze the results and make recommendations collaboratively.

APPENDIX 6 – COURSE TO PROGRAM SLO MAPPING DOCUMENT

COURSE #	SLO		1 Apply the scientific method. (MAPPING: SI2)	2 Demonstrate spatial literacy. (MAPPING: PC)	3 Analyze spatial information and patterns. (MAPPING: SI)	4 Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	5 Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 104	1	Design and implement a research project to effectively evaluate a problem using a geographic information system	X	X	X	X	X
GEOG 104	2	Develop ability to collect, manipulate, classify, and interpret spatial data		X	X		
GEOG 104	3	Demonstrate ability to apply appropriate application of GIS operations to analyze data and explain the various methods for effectively presenting results		X	X		X
GEOG 104	4	Utilize global positioning systems in combination with GIS to collect, import, and display/store spatial information					X
GEOG 104	5	Development of Spatial Literacy through the use of computers, mathematical algorithms, and spatial statistics to analyze geospatial problems		X	X	X	X
GEOG 106	1	Within the context of world regions, students be able to describe and explain current socio-economic, cultural, and political issues resulting from the important yet interactive and opposing forces of homogenization and diversification (*e.g., market vs. socialist economic systems in China; the rise of Islamic extremism; supranationalism and devolution in Europe; uneven economic development in Southeast Asia; etc.*).				X	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 120	1	Students should be able to memorize, apply, and explain the rationale behind **classification systems** developed for recognizing, explaining, and predicting relationships, patterns, and trends in Earth Systems (*e.g., classification of rocks; classification of thermal vs. dynamic weather systems; forms of energy, especially associated with the energy transformations produced by atmospheric, hydrospheric, biospheric, and lithospheric processes; classification of climates in terms of the availability of the inputs to photosynthesis; classification of biomes; classification of erosional vs. depositional environments; etc.*)	x			x	
GEOG 120	2	Students should be able to describe, apply, and explain the evidence behind the foundational scientific **models** commonly used to explain and predict relationships, patterns, and trends within Earth Systems (*e.g., Copernican Model describing Earth-Sun relationships; Kinetic Theory, such as applied to systems powered by differential heating; Dynamics, such as applied to the general circulation of the atmosphere; Thermodynamics, including the unique role of water within the Earth's Global Energy Budget, or the production of equilibrium landforms by the agents of gradation; Wave Cyclone theory; Plate Tectonic theory; etc.*).	x			x	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 120	3	Students should be able to explain the step-by-step causes and outcomes of **thermal circulation** within the Earth System, including across various spatial and temporal scales (*e.g., Sea Breezes vs. Monsoonal Wind Systems vs. Hadley Cells; Plate Tectonics; etc.*).	X			X	
GEOG 120	4	Students should be able to discuss the unique characteristics and importance of **water** within the Earth System (*e.g., high capacity to store heat energy per change in temperature; high latent heat associated with phase changes; radiative properties relative to infrared radiation and greenhouse warming; energy source behind convective weather systems; systematic distribution of the mechanisms by which precipitation is produced; biome variation as an evolutionary response to the distribution of water resources; significance of evapotranspiration by plants to Earth's energy budget; role of water as a flux in producing magmas at subduction zones; role of water in producing clays and free ions through chemical weathering; gradational work performed by streams, waves, and glaciers producing erosional vs. depositional landforms; etc.*).	X			X	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 121	1	Develop observational skills related to "reading the landscape" (e.g., relating changes in solar declination to seasonal variation; relating changes in longitude to differences in time keeping; relating real-time weather observations to synoptic-scale weather maps; developing and using morphologic classification systems (e.g., mafic vs. felsic igneous rock classification; the biologic taxonomy; etc.); development of hypotheses derived from observation-based rationales; relating stream offsets, sagponds, and pressure ridges, as found on topographic maps, to lateral-fault location, and direction and rate of displacement; etc.).	x			x	
GEOG 121	2	Develop the ability to recognize and name the individual components of the physical environment, and of interrelationships between and spatial patterns produced by these individual components (e.g., recognition of dominant plant species within Coastal Sage Scrub biome; recognition of species variation by habitat (e.g., north vs. south facing slopes) within a biome; recognition of typical San Diego weather features and patterns (e.g., inversions, sea-breezes, downslope adiabatics, synoptic-scale Highs vs. synoptic-scale Lows vs. mesoscale Lows); etc.).	x			x	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 121	3	Develop technical skills and experience utilizing the tools of Physical Geography to collect data (e.g., spherical grid systems; compasses and clinometers; GPS receivers; infrared guns; psychrometers and psychrometric tables; wading rods, pygmy meters, tag lines, shovels, and velocity-discharge ratings; etc.).	x			x	
GEOG 121	4	Develop technical skills used to analyze and interpret the data of Physical Geography (e.g., usage of the analemma, topographic maps, synoptic-scale weather maps, seismographs, hydrographs, etc.; application of conversion factors, trig functions, graphing, isoline mapping, topographic profiling, etc.).	x			x	
GEOG 121	5	To illustrate the scientific method (e.g., hypothesis testing using the age of Hawaiian Island basalts relative to their distribution to predict direction and rate of plate motion; hypothesis testing using the temperature response of sand vs. water relative to radiation inputs to explain continentality; hypothesis testing of the temperature response of dark vs. light colored material relative to radiation inputs to account for natural selection of leaf structures present on Encelia farinosa vs. E. californica; etc.).	x			x	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 130	1	Students should be able to memorize, apply, and explain the rationale behind **classification systems** developed for recognizing, explaining, and predicting relationships, patterns, and trends in Cultural Systems (*e.g., the demographic transition; classification of languages; classification of religious systems; human development index; genetic classification system of boundaries; state territorial morphology; etc.)*	X			X	
GEOG 140	1	Students should be able to memorize, apply, and explain the rationale behind **classification systems** developed for recognizing, explaining, and predicting relationships, patterns, and trends within the Atmospheric System (*e.g., classification of atmospheric layering; classification of thermal vs. dynamic weather systems; classification of stable vs. unstable vs. conditionally unstable tropospheric conditions; classification of cloud types as an indicator of tropospheric stability; classification of diabatic vs. adiabatic work processes; classification of mesoscale vs. synoptic scale vs. continental scale vs. global scale atmospheric motions; classification of zonal vs. meridional Jet Stream patterns; etc.*).	X			X	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 140	2	Students should be able to describe, apply, and explain the evidence behind the foundational scientific **models** commonly used to explain and predict relationships, patterns, and trends within the Atmospheric System *(e.g., Synoptic scale weather maps, including the analyzed version of surface isobar maps and upper-level height-contour maps; Kinetic Theory including the Equation of State and the Hydrostatic Equation, such as applied to systems powered by differential heating; Thermodynamics, including the unique role of water-vapor within the atmospheric system especially in terms of the energy transformations associated with phase changes; Dynamics, such as applied to the general circulation of the atmosphere, and to meridional Jet Stream patterns that produce zones of upper-level divergence vs. convergence; Wave Cyclone Theory resulting from Jet Stream dynamics and producing the traveling Cold Core Lows and associated frontal dynamics so common to winter across the United States (i.e., Midlatitude Cyclogenesis); etc.).*	X			X	
GEOG 140	3	Students should be able to explain the step-by-step causes and outcomes of **thermal circulation** within the Atmospheric System, including across various spatial and temporal scales *(e.g., Sea Breezes vs. Monsoonal Wind Systems vs. Hadley Cells; production of Warm Core Lows such as stationary Desert Thermal Lows vs. traveling Tropical Cyclones (e.g., Hurricanes); etc.).*	X			X	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 140	4	Students should be able to discuss the unique characteristics and importance of **water** especially in the **vapor phase** within the Atmospheric System (*e.g., high capacity to store heat energy per change in temperature; high latent heat associated with phase changes; radiative properties relative to infrared radiation and greenhouse warming; energy source behind convective weather systems; basic measures of humidity (e.g., specific humidity vs. saturation specific humidity vs. relative humidity); systematic distribution of the mechanisms by which precipitation is produced; effect on atmospheric instability; etc.*).	x			x	
GEOG 150	1	**CROSS-LISTED: SEE GEOL 150**					
GEOG 170	1	Students should be able to describe and explain California's location relative to the tectonic system, and thus why it's a) so seismically active and b) topographically diverse.	x	x	x	x	
GEOG 170	2	Students should be able to describe and explain California's location relative to the general circulation of the atmosphere, summer vs. winter, and all that implies	x	x	x	x	
GEOG 170	3	Students should be able to describe the evolutionary response to climatic variation within the state, in association with its topography, resulting in its spectacular diversity of ecosystems	x	x	x	x	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 170	4	Students should be able to describe the natural distribution of water resources in the state relative to human development and demographic trends, and thus be able to explain the logistical, political, and ecological implications that result. Likewise, the situation for the entire arid West	x	x	x	x	
GEOG 170	5	Students should be able to name California's major sub-regions, and describe and explain the site, situation, and economic base of each	x	x	x	x	
GEOG 170	6	Students should be able to describe the unique demographic diversity of California, both in terms of the innovative strength it brings and challenges it presents	x	x	x	x	
GEOG 172	1	Students will be able to define, analyze, and synthesize geographic components within the designated field area	x	x	x	x	
GEOG 173	1	Students will be able to define, analyze, and synthesize geographic components within the designated field area	x	x	x	x	
GEOG 174	1	Students will be able to define, analyze, and synthesize geographic components within the designated field area	x	x	x	x	
GEOG 175	1	Students will be able to define, analyze, and synthesize geographic components within the designated field area.	x	x	x	x	

COURSE #	SLO		Apply the scientific method. (MAPPING: SI2)	Demonstrate spatial literacy. (MAPPING: PC)	Analyze spatial information and patterns. (MAPPING: SI)	Evaluate relationships between humans and the environment. (MAPPING: SI; CC)	Employ geoscience technology for spatial data management. (MAPPING: IT)
GEOG 176	1	Students will be able to define, analyze, and synthesize geographic components within the designated field area	x	x	x	x	
GEOG 199	1	Students will be able to identify, examine, and assess geographic component(s) in a study of individualized content	x	x	x	x	
GEOG 299	1	A: Students will be able to define and analyze geographic components of the discipline within a specialized topic in geography.	x	x	x	x	
GEOG 299	2	B: Students will be able to define, analyze, and synthesize geographic components within a specialized topic in geography.	x	x	x	x	

COURSE #	SLO		1 The student will be able to recognize and explain the role of fundamental geologic principles, such as plate tectonic theory and deep time, in the interpretation of observed geologic phenomena. (MAPPING: SI 3 and 5)	2 The student will be able to research, evaluate, and cite scientific information in order to formulate coherent summaries of earth processes. (MAPPING: IT 2)	3 The student will be able to define the scientific method and apply it to observed geologic phenomena. (MAPPING: SI 2)	4 The student will be able to interpret geologic processes using underlying chemical properties and physical laws. (MAPPING: SI 1)	5 The student will be able to measure, manipulate, and interpret scientific data. (MAPPING: ML 2)
GEOL 104	1	Identify and describe the relationship between energy transformations and	X	X	X		
GEOL 110	1	Explain the rock cycle and how it relates to the composition, texture, classification, and formative	X	X	X		
	2	Recognize the structural and textural relationships of a rock record, apply deductive reasoning, and formulate a	X	X	X		
	3	Recognize and interpret the cause and effect relationship between observed geologic features and their	X	X	X		
	4	Explain the development of geologic hazards and resources and evaluate the interaction between humans and	X	X	X		
GEOL 111	1	hand specimens	X				
	2	Demonstrate an ability to operate tools of geology to collect and/or	X	X	X	X	X
	3	Use, interpret and analyze topographic and geologic maps	X	X	X	X	X
	4	Arrange geologic events in order of occurrence given either geologic	X	X	X	X	X
	5	cross sections	X	X	X	X	X
	6	spot elevation data	X	X	X	X	X
GEOL 121	1	Recognize geologic features in relation to deep time and within the	X				

COURSE #	SLO		The student will be able to recognize and explain the role of fundamental geologic principles, such as plate tectonic theory and deep time, in the interpretation of observed geologic phenomena. (MAPPING: SI 3 and 5)	The student will be able to research, evaluate, and cite scientific information in order to formulate coherent summaries of earth processes. (MAPPING: IT 2)	The student will be able to define the scientific method and apply it to observed geologic phenomena. (MAPPING: SI 2)	The student will be able to interpret geologic processes using underlying chemical properties and physical laws. (MAPPING: SI 1)	The student will be able to measure, manipulate, and interpret scientific data. (MAPPING: ML 2)
GEOL 150	1	Identify key geologic features in San Diego County and nearby areas, interpret their origin, and arrange	X	X			
GEOL 162	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	
GEOL 163	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	
GEOL 164	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	
GEOL 165	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	
GEOL 172	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	
GEOL 173	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	

COURSE #	SLO		The student will be able to recognize and explain the role of fundamental geologic principles, such as plate tectonic theory and deep time, in the interpretation of observed geologic phenomena. (MAPPING: SI 3 and 5)	The student will be able to research, evaluate, and cite scientific information in order to formulate coherent summaries of earth processes. (MAPPING: IT 2)	The student will be able to define the scientific method and apply it to observed geologic phenomena. (MAPPING: SI 2)	The student will be able to interpret geologic processes using underlying chemical properties and physical laws. (MAPPING: SI 1)	The student will be able to measure, manipulate, and interpret scientific data. (MAPPING: ML 2)
GEOL 174	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	
GEOL 175	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	
GEOL 176	1	Students will be able to define, analyze, and synthesize geographic components within the designated	X	X	X	X	
GEOL 199	1	Students will be able to identify, examine, and assess geologic component(s) in a study of	X	X	X	X	
GEOL 210	1	Identify the natural provinces of California and analyze their	X	X	X	X	
GEOL 220	1	Recognize the geologic features of national parks that categorize their	X	X	X	X	
GEOL 230	1	Analyze and explain the processes that form geologic hazards	X	X	X	X	
GEOL 299	1	A: Students will be able to define and analyze geologic components of the discipline within a specialized topic in	X	X	X	X	
	2	B: Students will be able to define, analyze, and synthesize geologic components within a specialized	X	X	X	X	

COURSE #	SLO		Find, use and evaluate resources for oceanographic information
OCEA 112	1	Apply the scientific method to comprehend, interpret, analyze and evaluate oceanographic concepts	x
	2	Relate the distribution and origin of sea floor features and sediments to plate tectonic theory	x
	3	Relate the structure of the water molecule to the chemical and physical properties of the ocean	x
	4	Demonstrate an understanding of the interaction between oceanic and atmospheric circulation	x
	5	Interpret graphical representations of bathymetry, waves, tides, salinity, temperature or pressure	x
OCEA 113	1		
	2		
	3		
OCEA 150	1	**CROSSLISTED: SEE GEOL 150**	
OCEA 199	1	Students will be able to identify, examine, and assess oceanographic component(s) in a study of individualized content	
OCEA 299	1	A: Students will be able to define and analyze oceanographic components of the discipline within a specialized topic in oceanography	
	2	B: Students will be able to define, analyze, and synthesize oceanographic components within a specialized topic in oceanography	

APPENDIX 7 – STUDENT SURVEY RESULTS

Grossmont College
Earth Sciences
Spring 2013
N=725
Response Rate 78.6%

Q1. What is your reason(s) for taking this class?

	Frequency	Percent
General education requirement	504	70.2
General interest	273	38.0
Required for major	129	18.0
Transfer	168	23.4
Improve basic skills/college success	58	8.1
Prerequisite	44	6.1
Improve job skills	29	4.0
Other	14	1.9

*Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentage is based on the total number of students responding to this item (i.e., 718).

Q1. What is your reason(s) for taking this class? (Other)

	Frequency
Personal interest	6
Fit schedule	3
General knowledge	2
Increase pay as teacher	1
Need credits for athletic	1
No choice	1
Total	**14**

Q2. How did you find out about this class?

	Frequency	Percent
Class schedule or college catalog	559	78.0
Grossmont College Counselor	85	11.9
Friend or family member	61	8.5
Other student recommendation	56	7.8
Other	31	4.3
Instructor	26	3.6
Public media (radio, TV, newspaper, ad)	11	1.5
Work referral	9	1.3
Grossmont College presentation or special event	5	.7

*Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentage is based on the total number of students responding to this item (i.e., 717).

Q2. How did you find out about this class? (Other)

	Frequency
Grossmont website	3
Retake class	3
Transfer requirement shee	3
WebAdvisor	3
High school class	2
Looked it up	2
Professor	2
AA/T class list	1
Assist.org	1
Friends	1
Grossmont Website	1
Internet	1
Navy recruiter	1
Newspaper	1
Only class available	1
Other students	1
Ratemyprofessor.com	1
Researched major	1
SDSU TAP	1
Webadvisor	1
Total	**31**

Q3. How many courses have you taken in this department at Grossmont College? (Including this current course and any repeated courses)

	Frequency	Percent
One	467	65.5
Two	155	21.7
Three	39	5.5
Three or more	52	7.3
Total	**713**	**100.0**
No Response	12	
Total	725	

Q4. This class was delivered:

	Frequency	Percent
in a traditional classroom setting	688	96.0
as a hybrid (part in classroom/part online)	27	3.8
online (100%)	1	.1
other	1	.1
Total	**717**	**100.0**
No Response	8	
Total	725	

Q4. This class was delivered: (Other)

	Frequency
95% in class, 5% online	1
Total	**1**

Q5. Which lines of communication are made available to you by your instructor?

	Frequency	Percent
Face to face	676	93.6
Email	644	89.2
Telephone/voice mail	362	50.1
Other	11	1.5

*Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentage is based on the total number of students responding to this item (i.e., 722).

Q5. Which lines of communication are made available to you by your instructor? (Other)

	Frequency
Office hours	4
Internet	2
Website	2
All	1
Appointments	1
Blackboard	1
Total	**11**

Q6. Which line of communication do you use most often when contacting your instructor?

	Frequency	Percent
Face to face	253	46.5
Email	284	52.2
Other	4	.7
Telephone/voice mail	3	.6
Total	**544**	**100.0**
No Response	181	
Total	725	

Q6. Which line of communication do you use most often when contacting your instructro? (Other)

	Frequency
Office hours	2
Blackboard	1
Never	1
Total	**4**

Q7. Which line of communication do you prefer your instructor to use when responding to your message?

	Frequency	Percent
Face to face	212	39.8
Email	313	58.8
Telephone/voice mail	4	.8
Other	3	.6
Total	**532**	**100.0**
No Response	193	
Total	725	

Q7. Which line of communication do you prefer your instructor to use when responding to your message? (Other)

	Frequency	Percent
Blackboard	1	.1
Office hours	1	.1
Text messages	1	.1
Total	**725**	**100.0**

Q8. Which of the following do you check most frequently for course information and/or messages?

	Frequency	Percent
Email	327	59.6
Blackboard Announcements	176	32.1
other	41	7.5
Voice mail	5	.9
Total	**549**	**100.0**
No Response	176	
Total	725	

Q8. Which of the following do you check most frequently for course information and/or messages? (Other)

	Frequency
Professors website	11
Class website	7
Syllabus	7
Website	5
Class time	4
Text messages	3
Classmates	1
Face to face	1
Handouts	1
Professor	1
Total	**41**

Q9. When I have questions or need to talk about course content or assignments, I usually meet/talk to my instructor:

	Frequency	Percent
before or after my class meets	278	52.0
via email	152	28.4
during office hours/appiontment	79	14.8
never (explain why)	21	3.9
via telephone	5	.9
Total	**535**	**100.0**
No Response	190	
Total	725	

Q9. When I have questions or need to talk about course content or assignments, I usually meet/talk to my instructor: (Other)

	Frequency
Too early in semester	16
Awkward	1
Class online resources	1
Class time	1
Friends	1
Get nervous	1
Total	**21**

Q10. Who else or what else do you turn to for extra help?

	Frequency	Percent
Friends who have taken the class	180	31.4
Textbook website	157	27.4
Other (be specific)	120	20.9
Tutor/tutoring center	117	20.4
Total	**574**	**100.0**
No Response	151	
Total	725	

Q10. Who else or what else do you turn to for extra help? (Other)

	Frequency
Internet	63
Classmates	19
Professor	9
Family	7
Textbook	5
Class website	3
Blackboard	2
Friends	2
Atlas	1
Blackboard/Practice test	1
Class notes	1
I don't know who to turn	1
Internet/Classmates	1
Internet/Family	1
Internet/Professor	1
Office hours	1
Professors website	1
Too early in semester	1
Total	**120**

Q11. Which of the following course resources helped you learn the course material?

	Frequency	Percent
Lecture	621	87.7
Textbook	448	63.3
Homework/Assignments	352	49.7
Handouts	362	51.1
Power Point slides	338	47.7
Quizzes	187	26.4
Instructor website	166	23.4
Group work in class	141	19.9
Computer presentations	133	18.8
Videos/DVDs	129	18.2
Course Blackboard site	107	15.1
Study groups	97	13.7
Other	26	3.7
Transparencies	19	2.7

*Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentage is based on the total number of students responding to this item (i.e., 708).

Q11. Which of the following course resources helped you learn the course material? (Other)

	Frequency
Internet	7
Class notes	5
Classmates	2
None of the above	2
Study guides	2
All of the above	1
Atlas	1
Google Maps	1
Packet	1
Professor	1
Professors website	1
Textbook	1
Workbook	1
Total	**26**

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Assessment & Testing Center)

	Frequency	Percent
Required to use	38	20.4
Voluntarily used	148	79.6
Total	**186**	**100.0**
No Response	539	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Assessment & Testing Center)

	Frequency	Percent
Helpful	150	58.6
Not helpful	106	41.4
Total	**256**	**100.0**
No Response	469	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (English Writing Lab)

	Frequency	Percent
Required to use	27	16.8
Voluntarily used	134	83.2
Total	**161**	**100.0**
No Response	564	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (English Writing Lab)

	Frequency	Percent
Helpful	147	58.3
Not helpful	105	41.7
Total	**252**	**100.0**
No Response	473	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Tech Mall)

	Frequency	Percent
Required to use	17	5.9
Voluntarily used	270	94.1
Total	**287**	**100.0**
No Response	438	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Tech Mall)

	Frequency	Percent
Helpful	216	78.3
Not helpful	60	21.7
Total	**276**	**100.0**
No Response	449	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Library (online resources)

	Frequency	Percent
Required to use	28	9.7
Voluntarily used	262	90.3
Total	**290**	**100.0**
No Response	435	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Library (online resources)

	Frequency	Percent
Helpful	231	83.7
Not helpful	45	16.3
Total	**276**	**100.0**
No Response	449	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (On-campus library)

	Frequency	Percent
Required to use	22	7.0
Voluntarily used	291	93.0
Total	**313**	**100.0**
No Response	412	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (On-campus library)

	Frequency	Percent
Helpful	237	85.9
Not helpful	39	14.1
Total	**276**	**100.0**
No Response	449	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Math Study Center)

	Frequency	Percent
Required to use	13	8.3
Voluntarily used	143	91.7
Total	**156**	**100.0**
No Response	569	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Math Study Center)

	Frequency	Percent
Helpful	149	58.7
Not helpful	105	41.3
Total	**254**	**100.0**
No Response	471	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Tutoring Center)

	Frequency	Percent
Required to use	12	6.9
Voluntarily used	162	93.1
Total	**174**	**100.0**
No Response	551	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Tutoring Center)

	Frequency	Percent
Helpful	198	73.1
Not helpful	73	26.9
Total	**271**	**100.0**
No Response	454	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (DSPS)

	Frequency	Percent
Required to use	7	6.5
Voluntarily used	101	93.5
Total	**108**	**100.0**
No Response	617	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (DSPS)

	Frequency	Percent
Helpful	116	50.4
Not helpful	114	49.6
Total	**230**	**100.0**
No Response	495	
Total	725	

12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (EOPS)

	Frequency	Percent
Required to use	9	8.0
Voluntarily used	103	92.0
Total	**112**	**100.0**
No Response	613	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (EOPS)

	Frequency	Percent
Helpful	117	49.8
Not helpful	118	50.2
Total	**235**	**100.0**
No Response	490	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Dept. Computer Labs)

	Frequency	Percent
Required to use	18	11.0
Voluntarily used	146	89.0
Total	**164**	**100.0**
No Response	561	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Dept. Computer Labs)

	Frequency	Percent
Helpful	155	68.0
Not helpful	73	32.0
Total	**228**	**100.0**
No Response	497	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Blackboard Help Line)

	Frequency	Percent
Required to use	34	19.7
Voluntarily used	139	80.3
Total	**173**	**100.0**
No Response	552	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Blackboard Help Line)

	Frequency	Percent
Helpful	174	69.6
Not helpful	76	30.4
Total	**250**	**100.0**
No Response	475	
Total	725	

Q12A. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Other (write in)

	Frequency	Percent
Required to use	8	13.8
Voluntarily used	50	86.2
Total	**58**	**100.0**
No Response	667	
Total	725	

Q12B. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assist you in completing this course. Also, did you find the resource helpful or not helpful? (Other (write in)

	Frequency	Percent
Helpful	41	44.6
Not helpful	51	55.4
Total	**92**	**100.0**
No Response	633	
Total	725	

Q12_Other. Please indicate if you were required to use/or voluntarily used any of the following campus resources to assit you in completing this course. Also, did you find the resource helpful or not helpfl? (Other)

	Frequency
BLC (Required - Helpful)	1
Bookstore (Required)	1
Class time (Voluntarily - Helpful)	1
Counslers (Required)	1
Griffin Center (study) (Voluntarily - Helpful)	1
Veteran's Center (Voluntarily - Helpful)	1
Total	**6**

Q13. What I am learning/have learned in this class could be useful outside of the classroom for purposes other than achieving my academic goals.

	Frequency	Percent
Yes	603	85.7
No	101	14.3
Total	**704**	**100.0**
No Response	21	
Total	725	

Q14. Which of these classroom characteristics have reduced your ability to learn the subject?

	Frequency	Percent
None	347	50.2
Desk size and/or quality	196	28.4
View of the whiteboard	97	14.0
Distracting noises	82	11.9
Cramped spaces/overcrowding	78	11.3
Inadequate heating and/or cooling	54	7.8
Other	32	4.6
Inadequate lighting	22	3.2

*Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentage is based on the total number of students responding to this item (i.e., 691).

Q14. Which of these classroom characteristics have reduced your ability to learn the subject (Other)

	Frequency
Other students	3
Uncomfortable chairs	3
Lack of experience	2
Bad handwriting	1
Boring	1
Class odors	1
Classmates talking	1
Clock placement	1
Course availablilty	1
Fast pace	1
Height	1
In-class tutoring	1
Inadequate supplies	1
Irrelevant questions	1
Late class	1
Late night	1
Laziness	1
Low capacity	1
Professor (hard of hearin	1
Room smell	1
Small desktop	1
Snacks in class	1
Surveys	1
Textbook cost	1
The late hours	1
Too much info at once	1
Uanswered questions	1
Total	**32**

Q15. Did you take coursework in high school that prepared you for college level math and science courses?

	Frequency	Percent
Yes	505	71.7
No	199	28.3
Total	**704**	**100.0**
No Response	21	
Total	725	

Q16. If this class was taken to satisfy the GE Physical Science requirement, why did you choose this course over other GE physical science courses? (Not applicable - this course was not taken to satisfy the GE requirement)

	Frequency	Percent
Sounded more interesting	320	45.9
Fit into my schedule best	247	35.4
N/A - this course was not taken to satisfy the GE requirement	124	17.8
Was the only course available	98	14.1
More relevant to my major	80	11.5
The class sounded easier	54	7.7
Other	19	2.7

*Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentage is based on the total number of students responding to this item (i.e., 697).

16. If this class was taken to satisfy the GE Physical Science requirement, why did you choose this course over other GE physical science courses? (Other)

	Frequency
General knowledge	3
Good professor	2
Personal interest	2
Major requirement	2
Best option	1
Career advancement	1
Failed class	1
Friend Recommendation	1
Friends in class	1
High school requirement	1
Navy after college	1
Taking multiple	1
Taking others as well	1
Travel experience	1
Total	**19**

APPENDIX 8 – HEADCOUNTS FOR DEGREES AND CERTIFICATES AWARDED

9	1.27%
2	0.28%
23	3.26%
7	0.99%
4	0.57%
2	0.28%
4	0.57%
3	0.42%
1	0.14%
9	1.27%
1	0.14%
39	5.52%
6	0.85%
4	0.57%
27	3.82%
6	0.85%
2	0.28%

Degree/cert count

	GE06	GE01	O
Spring 2012	2	0	0
Spring 2011	3	0	0
Spring 2010	0	1	0
Sp 2009	0	0	0
Sp 2008	2	1	0
Sp 2007	0	0	0

App #8

10	2.06%
2	0.41%
24	4.95%
8	1.65%
5	1.03%
1	0.21%
7	1.44%
1	0.21%
40	8.25%
7	1.44%
5	1.03%
27	5.57%
8	1.65%
2	0.41%
1	0.21%
2	0.41%
1	0.21%

Degree			Certificate		
[illegible]	7	0.99%	[illegible]	18	3.71%
[illegible]	2	0.28%	[illegible]	9	1.86%
[illegible]	1	0.14%	[illegible]	2	0.41%
[illegible]	3	0.42%	[illegible]	2	0.41%
[illegible]	6	0.85%	[illegible]	5	1.03%
[illegible]	9	1.27%	[illegible]	5	1.03%
[illegible]	2	0.28%	[illegible]	7	1.44%
[illegible]	2	0.28%	[illegible]	2	0.41%
[illegible]	2	0.28%	[illegible]	3	0.62%
[illegible]	6	0.85%	[illegible]	2	0.41%
[illegible]	4	0.57%	[illegible]	1	0.21%
[illegible]	2	0.28%	[illegible]	1	0.21%
[illegible]	23	3.26%	[illegible]	2	0.41%
[illegible]	13	1.84%	[illegible]	7	1.44%
[illegible]	6	0.85%	[illegible]	2	0.41%
[illegible]	18	2.55%	[illegible]	2	0.41%
[illegible]	4	0.57%	[illegible]	1	0.21%
[illegible]	48	6.80%	[illegible]	13	2.68%
[illegible]	2	0.28%	[illegible]	3	0.62%

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Degree		
[illegible]	6	0.85%
[illegible]	3	0.42%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	2	0.28%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	12	1.70%
[illegible]	2	0.28%
[illegible]	6	0.85%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	35	4.96%
[illegible]	20	2.83%
[illegible]	2	0.28%
[illegible]	4	0.57%
[illegible]	2	0.28%
[illegible]	30	4.25%

Certificate		
[illegible]	2	0.41%
[illegible]	245	50.52%
[illegible]	485	100.00%

Degree

[illegible]	[illegible]	[illegible]
[illegible]	1	0.14%
[illegible]	11	1.56%
[illegible]	1	0.14%
[illegible]	3	0.42%
[illegible]	2	0.28%
[illegible]	8	1.13%
[illegible]	29	4.11%
[illegible]	25	3.54%
[illegible]	36	5.10%
[illegible]	43	6.09%
[illegible]	86	12.18%
[illegible]	21	2.97%
	706	100.00%

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Grossmont Head Count by Degree for 2011SP

Degree		
[illegible]	6	0.87%
[illegible]	5	0.72%
[illegible]	25	3.62%
[illegible]	10	1.45%
[illegible]	2	0.29%
[illegible]	4	0.58%
[illegible]	1	0.14%
[illegible]	2	0.29%
[illegible]	4	0.58%
[illegible]	1	0.14%
[illegible]	6	0.87%
[illegible]	1	0.14%
[illegible]	60	8.68%
[illegible]	5	0.72%
[illegible]	3	0.43%
[illegible]	25	3.62%
[illegible]	3	0.43%

Grossmont Head Count by Certificate for 2011SP

Certificate		
[illegible]	6	1.85%
[illegible]	8	2.47%
[illegible]	32	9.88%
[illegible]	12	3.70%
[illegible]	4	1.23%
[illegible]	3	0.93%
[illegible]	9	2.78%
[illegible]	1	0.31%
[illegible]	1	0.31%
[illegible]	57	17.59%
[illegible]	5	1.54%
[illegible]	3	0.93%
[illegible]	30	9.26%
[illegible]	3	0.93%
[illegible]	3	0.93%
[illegible]	13	4.01%
[illegible]	1	0.31%

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Degree			Certificate		
[illegible]	3	0.43%	[illegible]	1	0.31%
[illegible]	13	1.88%	[illegible]	2	0.62%
[illegible]	1	0.14%	[illegible]	11	3.40%
[illegible]	6	0.87%	[illegible]	10	3.09%
[illegible]	1	0.14%	[illegible]	1	0.31%
[illegible]	1	0.14%	[illegible]	3	0.93%
[illegible]	1	0.14%	[illegible]	11	3.40%
[illegible]	9	1.30%	[illegible]	6	1.85%
[illegible]	10	1.45%	[illegible]	1	0.31%
[illegible]	1	0.14%	[illegible]	4	1.23%
[illegible]	3	0.43%	[illegible]	2	0.62%
[illegible]	10	1.45%	[illegible]	6	1.85%
[illegible]	5	0.72%	[illegible]	2	0.62%
[illegible]	1	0.14%	[illegible]	6	1.85%
[illegible]	4	0.58%	[illegible]	1	0.31%
[illegible]	2	0.29%	[illegible]	4	1.23%
[illegible]	1	0.14%	[illegible]	2	0.62%
[illegible]	17	2.46%	[illegible]	2	0.62%
[illegible]	28	4.05%	[illegible]	1	0.31%

Degree		
[illegible]	8	1.16%
[illegible]	19	2.75%
[illegible]	11	1.59%
[illegible]	50	7.24%
[illegible]	3	0.43%
[illegible]	2	0.29%
[illegible]	12	1.74%
[illegible]	1	0.14%
[illegible]	4	0.58%
[illegible]	1	0.14%
[illegible]	2	0.29%
[illegible]	1	0.14%
[illegible]	13	1.88%
[illegible]	2	0.29%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	2	0.29%
[illegible]	2	0.29%
[illegible]	44	6.37%

Certificate		
[illegible]	2	0.62%
[illegible]	9	2.78%
[illegible]	4	1.23%
[illegible]	2	0.62%
[illegible]	30	9.26%
[illegible]	10	3.09%
	324	100.00%

Degree

Degree	Count	Percent
[illegible]	17	2.46%
[illegible]	1	0.14%
[illegible]	3	0.43%
[illegible]	31	4.49%
[illegible]	1	0.14%
[illegible]	5	0.72%
[illegible]	7	1.01%
[illegible]	4	0.58%
[illegible]	1	0.14%
[illegible]	7	1.01%
[illegible]	15	2.17%
[illegible]	5	0.72%
[illegible]	15	2.17%
[illegible]	9	1.30%
[illegible]	42	6.08%
[illegible]	69	9.99%
[illegible]	691	100.00%

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Grossmont Head Count by Degree for 2010SP

Degree		
[illegible]	4	0.58%
[illegible]	20	2.89%
[illegible]	8	1.15%
[illegible]	2	0.29%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	1	0.14%
[illegible]	12	1.73%
[illegible]	3	0.43%
[illegible]	43	6.20%
[illegible]	1	0.14%
[illegible]	26	3.75%
[illegible]	3	0.43%
[illegible]	7	1.01%
[illegible]	13	1.88%

Grossmont Head Count by Certificate for 2010SP

Certificate		
[illegible]	5	2.19%
[illegible]	1	0.44%
[illegible]	21	9.21%
[illegible]	7	3.07%
[illegible]	2	0.88%
[illegible]	4	1.75%
[illegible]	3	1.32%
[illegible]	49	21.49%
[illegible]	2	0.88%
[illegible]	29	12.72%
[illegible]	4	1.75%
[illegible]	8	3.51%
[illegible]	2	0.88%
[illegible]	1	0.44%
[illegible]	16	7.02%
[illegible]	6	2.63%
[illegible]	2	0.88%

Degree			Certificate		
[illegible]	3	0.43%	[illegible]	7	3.07%
[illegible]	2	0.29%	[illegible]	4	1.75%
[illegible]	1	0.14%	[illegible]	1	0.44%
[illegible]	6	0.87%	[illegible]	5	2.19%
[illegible]	6	0.87%	[illegible]	11	4.82%
[illegible]	2	0.29%	[illegible]	8	3.51%
[illegible]	5	0.72%	[illegible]	8	3.51%
[illegible]	7	1.01%	[illegible]	3	1.32%
[illegible]	4	0.58%	[illegible]	1	0.44%
[illegible]	2	0.29%	[illegible]	1	0.44%
[illegible]	5	0.72%	[illegible]	1	0.44%
[illegible]	11	1.59%	[illegible]	1	0.44%
[illegible]	50	7.22%	[illegible]	1	0.44%
[illegible]	11	1.59%	[illegible]	1	0.44%
[illegible]	17	2.45%	[illegible]	6	2.63%
[illegible]	18	2.60%	[illegible]	2	0.88%
[illegible]	39	5.63%	[illegible]	5	2.19%
[illegible]	1	0.14%	[illegible]	228	100.00%
[illegible]	7	1.01%			

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	9	1.30%
	6	0.87%
	2	0.29%
	2	0.29%
	7	1.01%
	1	0.14%
	1	0.14%
	1	0.14%
	1	0.14%
	53	7.65%
	16	2.31%
	5	0.72%
	4	0.58%
	7	1.01%
	34	4.91%
	2	0.29%
	8	1.15%
	1	0.14%
	4	0.58%

Degree

[illegible]	4	0.58%
[illegible]	4	0.58%
[illegible]	12	1.73%
[illegible]	165	23.81%
[illegible]	693	100.00%

Grossmont Head Count by Degree for 2009SP

Degree		
[illegible]	1	0.13%
[illegible]	14	1.85%
[illegible]	11	1.46%
[illegible]	2	0.26%
[illegible]	1	0.13%
[illegible]	4	0.53%
[illegible]	2	0.26%
[illegible]	1	0.13%
[illegible]	9	1.19%
[illegible]	2	0.26%
[illegible]	4	0.53%
[illegible]	2	0.26%
[illegible]	59	7.81%
[illegible]	4	0.53%
[illegible]	1	0.13%
[illegible]	32	4.24%
[illegible]	2	0.26%

Grossmont Head Count by Certificate for 2009SP

Certificate		
[illegible]	3	1.28%
[illegible]	17	7.26%
[illegible]	11	4.70%
[illegible]	4	1.71%
[illegible]	2	0.85%
[illegible]	5	2.14%
[illegible]	4	1.71%
[illegible]	1	0.43%
[illegible]	58	24.79%
[illegible]	4	1.71%
[illegible]	2	0.85%
[illegible]	35	14.96%
[illegible]	2	0.85%
[illegible]	5	2.14%
[illegible]	3	1.28%
[illegible]	3	1.28%
[illegible]	2	0.85%

Degree			Certificate		
[illegible]	9	1.19%	[illegible]	1	0.43%
[illegible]	8	1.06%	[illegible]	1	0.43%
[illegible]	3	0.40%	[illegible]	12	5.13%
[illegible]	3	0.40%	[illegible]	6	2.56%
[illegible]	2	0.26%	[illegible]	2	0.85%
[illegible]	2	0.26%	[illegible]	1	0.43%
[illegible]	1	0.13%	[illegible]	5	2.14%
[illegible]	1	0.13%	[illegible]	1	0.43%
[illegible]	8	1.06%	[illegible]	2	0.85%
[illegible]	4	0.53%	[illegible]	2	0.85%
[illegible]	3	0.40%	[illegible]	3	1.28%
[illegible]	4	0.53%	[illegible]	9	3.85%
[illegible]	5	0.66%	[illegible]	5	2.14%
[illegible]	2	0.26%	[illegible]	1	0.43%
[illegible]	2	0.26%	[illegible]	5	2.14%
[illegible]	70	9.27%	[illegible]	3	1.28%
[illegible]	26	3.44%	[illegible]	1	0.43%
[illegible]	12	1.59%	[illegible]	1	0.43%
[illegible]	7	0.93%	[illegible]	1	0.43%

Degree		
[illegible]	3	0.40%
[illegible]	5	0.66%
[illegible]	6	0.79%
[illegible]	1	0.13%
[illegible]	1	0.13%
[illegible]	4	0.53%
[illegible]	1	0.13%
[illegible]	11	1.46%
[illegible]	2	0.26%
[illegible]	1	0.13%
[illegible]	5	0.66%
[illegible]	97	12.85%
[illegible]	12	1.59%
[illegible]	3	0.40%
[illegible]	2	0.26%
[illegible]	2	0.26%
[illegible]	36	4.77%
[illegible]	2	0.26%
[illegible]	5	0.66%

Certificate		
[illegible]	2	0.85%
[illegible]	6	2.56%
[illegible]	1	0.43%
[illegible]	2	0.85%
[illegible]	234	100.00%

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Degree		
[illegible]	5	0.66%
[illegible]	1	0.13%
[illegible]	2	0.26%
[illegible]	225	29.80%
[illegible]	755	100.00%

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Grossmont Head Count by Degree for 2008SP

Degree	[illegible]	[illegible]
[illegible]	25	3.68%
[illegible]	5	0.74%
[illegible]	1	0.15%
[illegible]	2	0.29%
[illegible]	6	0.88%
[illegible]	1	0.15%
[illegible]	10	1.47%
[illegible]	1	0.15%
[illegible]	1	0.15%
[illegible]	2	0.29%
[illegible]	39	5.74%
[illegible]	2	0.29%
[illegible]	26	3.82%
[illegible]	2	0.29%
[illegible]	1	0.15%
[illegible]	1	0.15%
[illegible]	9	1.32%

Grossmont Head Count by Certificate for 2008SP

Certificate	[illegible]	[illegible]
[illegible]	31	14.62%
[illegible]	5	2.36%
[illegible]	2	0.94%
[illegible]	46	21.70%
[illegible]	2	0.94%
[illegible]	30	14.15%
[illegible]	9	4.25%
[illegible]	3	1.42%
[illegible]	3	1.42%
[illegible]	1	0.47%
[illegible]	1	0.47%
[illegible]	11	5.19%
[illegible]	8	3.77%
[illegible]	3	1.42%
[illegible]	5	2.36%
[illegible]	2	0.94%
[illegible]	3	1.42%

Degree	[illegible]	[illegible]
[illegible]	3	0.44%
[illegible]	2	0.29%
[illegible]	3	0.44%
[illegible]	5	0.74%
[illegible]	1	0.15%
[illegible]	1	0.15%
[illegible]	8	1.18%
[illegible]	7	1.03%
[illegible]	2	0.29%
[illegible]	1	0.15%
[illegible]	2	0.29%
[illegible]	5	0.74%
[illegible]	2	0.29%
[illegible]	4	0.59%
[illegible]	2	0.29%
[illegible]	109	16.03%
[illegible]	18	2.65%
[illegible]	2	0.29%
[illegible]	1	0.15%

Certificate	[illegible]	[illegible]
[illegible]	2	0.94%
[illegible]	12	5.66%
[illegible]	5	2.36%
[illegible]	6	2.83%
[illegible]	2	0.94%
[illegible]	2	0.94%
[illegible]	4	1.89%
[illegible]	4	1.89%
[illegible]	1	0.47%
[illegible]	1	0.47%
[illegible]	1	0.47%
[illegible]	6	2.83%
[illegible]	1	0.47%
[illegible]	212	100.00%

[illegible]	8	1.18%
[illegible]	1	0.15%
[illegible]	4	0.59%
[illegible]	3	0.44%
[illegible]	3	0.44%
[illegible]	2	0.29%
[illegible]	4	0.59%
[illegible]	6	0.88%
[illegible]	4	0.59%
[illegible]	1	0.15%
[illegible]	58	8.53%
[illegible]	11	1.62%
[illegible]	1	0.15%
[illegible]	1	0.15%
[illegible]	1	0.15%
[illegible]	2	0.29%
[illegible]	43	6.32%
[illegible]	1	0.15%
[illegible]	6	0.88%

[illegible]	2	0.29%
[illegible]	2	0.29%
[illegible]	204	30.00%
[illegible]	680	100.00%

Grossmont Head Count by Degree for 2007SP

Degree		
[illegible]	2	0.33%
[illegible]	24	3.92%
[illegible]	6	0.98%
[illegible]	1	0.16%
[illegible]	1	0.16%
[illegible]	3	0.49%
[illegible]	1	0.16%
[illegible]	1	0.16%
[illegible]	2	0.33%
[illegible]	1	0.16%
[illegible]	2	0.33%
[illegible]	38	6.20%
[illegible]	4	0.65%
[illegible]	35	5.71%
[illegible]	2	0.33%
[illegible]	14	2.28%
[illegible]	1	0.16%

Grossmont Head Count by Certificate for 2007SP

Certificate		
[illegible]	3	1.40%
[illegible]	29	13.49%
[illegible]	9	4.19%
[illegible]	2	0.93%
[illegible]	2	0.93%
[illegible]	3	1.40%
[illegible]	1	0.47%
[illegible]	43	20.00%
[illegible]	4	1.86%
[illegible]	40	18.60%
[illegible]	2	0.93%
[illegible]	8	3.72%
[illegible]	1	0.47%
[illegible]	2	0.93%
[illegible]	1	0.47%
[illegible]	5	2.33%
[illegible]	1	0.47%

Degree			Certificate		
[illegible]	3	0.49%	[illegible]	6	2.79%
[illegible]	3	0.49%	[illegible]	4	1.86%
[illegible]	2	0.33%	[illegible]	1	0.47%
[illegible]	3	0.49%	[illegible]	2	0.93%
[illegible]	4	0.65%	[illegible]	2	0.93%
[illegible]	1	0.16%	[illegible]	3	1.40%
[illegible]	2	0.33%	[illegible]	6	2.79%
[illegible]	3	0.49%	[illegible]	2	0.93%
[illegible]	1	0.16%	[illegible]	4	1.86%
[illegible]	2	0.33%	[illegible]	4	1.86%
[illegible]	1	0.16%	[illegible]	5	2.33%
[illegible]	87	14.19%	[illegible]	1	0.47%
[illegible]	20	3.26%	[illegible]	1	0.47%
[illegible]	2	0.33%	[illegible]	2	0.93%
[illegible]	3	0.49%	[illegible]	2	0.93%
[illegible]	2	0.33%	[illegible]	2	0.93%
[illegible]	3	0.49%	[illegible]	1	0.47%
[illegible]	3	0.49%	[illegible]	10	4.65%
[illegible]	10	1.63%	[illegible]	1	0.47%

Degree	Count	Percent
	4	0.65%
	1	0.16%
	1	0.16%
	1	0.16%
	2	0.33%
	62	10.11%
	17	2.77%
	1	0.16%
	4	0.65%
	31	5.06%
	1	0.16%
	11	1.79%
	4	0.65%
	1	0.16%
	179	29.20%
	613	100.00%

Certificate	Count	Percent
	215	100.00%

APPENDIX 10 – SABBATICALS, CONFERENCE, WORKSHOP AND STAFF DEVELOPMENT ACTIVITIES

APPENDIX 10

Sabbaticals, Conference, Workshop and Staff Development Activities

Name	Activity	Relevance
Mark Goodman	LA's Faulted Landscape Flex trip – Sp '12	Increased knowledge to incorporate in course presentation
Mark Goodman	Native Oaks of San Diego County Flex trip – Fl'11	Increased knowledge to incorporate in course presentation
Mark Goodman	San Diego's Rivers and Creeks Flex trip – Sp '11	Increased knowledge to incorporate in course presentation
Mark Goodman	Orange County Groundwater Flex trip Fl '10	Increased knowledge to incorporate in course presentation
Mark Goodman	Hydrodiversity of the Salton Trough Flex trip Sp '09	Increased knowledge to incorporate in course presentation
Mark Goodman	Sabbatical exploration of SW US & potential development of a water-related program	Investigate possibilities for new Earth Science program and to learn more about the geography/water resources of the SW
Mark Goodman	Travel to Malaysia, Singapore, and Thailand during Summer/Winter breaks for period under review.	Gain firsthand experience of Southeast Asia's physical and cultural geography and incorporate into lectures.
Mark Goodman	Field Class: "E Sierra Shear Zone," Cerro Coso College – F 08	Increased knowledge to incorporate in course presentation
Chris Hill	Accreditation Institute 2010 and 2012	Increased campus leadership knowledge
Chris Hill	Retreat on Student Learning and Assessment 2009	Increased campus leadership knowledge
Chris Hill	Summer Leadership Development Academy 2009	Increased campus leadership knowledge
Chris Hill	Asilomar Leadership Skills Seminar 2009	Increased campus leadership knowledge
Chris Hill	Conference on Best Practices in Institutional Effectiveness 2008	Increased campus leadership knowledge
Chris Hill	Faculty Leadership Institute 2006	Increased campus leadership knowledge
Gary Jacobson	Foreign travel (Nicaragua) sum '11	Increased knowledge to incorporate in course presentation
Gary Jacobson	San Diego's Rivers and Creeks Flex trip – Sp '11	Increased knowledge to incorporate in course presentation

APPENDIX 10

Sabbaticals, Conference, Workshop and Staff Development Activities

Gary Jacobson	SDSU Geotech Conference sum '10	Increased knowledge to incorporate in course presentation
Gary Jacobson	3D Application Development – Flex workshop Fl '07	Share sabbatical-learned skills with campus
Scott Therkalsen	LA's Faulted Landscape Flex trip – Sp '12	Increased knowledge to incorporate in course presentation
Scott Therkalsen	Native Oaks of San Diego County Flex trip – Fl'11	Increased knowledge to incorporate in course presentation
Scott Therkalsen	San Diego's Rivers and Creeks Flex trip – Sp '11	Increased knowledge to incorporate in course presentation
Scott Therkalsen	Orange County Groundwater Flex trip Fl '10	Increased knowledge to incorporate in course presentation
Scott Therkalsen	Hydrodiversity of the Salton Trough Flex trip Sp '09	Increased knowledge to incorporate in course presentation
Scott Therkalsen	California Geographical Society Conference Sp '12	Peer interaction and knowledge of field area (Davis)
Scott Therkalsen	California Geographical Society Conference Sp '10	Peer interaction and knowledge of field area (Fullerton)
Scott Therkalsen	California Geographical Society Conference Sp '08	Peer interaction and knowledge of field area (Chico)
Scott Therkalsen	SDSU Geotech Conference sum '10	Increased knowledge to incorporate in course presentation
Scott Therkalsen	Foreign Travel (Indonesia, Malysia, Borneo) Sum '12	Increased regional knowledge to be used in course presentation
Scott Therkalsen	Foreign Travel (Argentina) Sp '11	Increased regional knowledge to be used in course presentation
Scott Therkalsen	California government and politics class Sp '12	Increased knowledge to incorporate in course presentation
Scott Therkalsen	Foreign Travel (India and Nepal) Sum '10	Increased regional knowledge to be used in course presentation
Scott Therkalsen	Certificate in online teaching Sp '09	Confirmed suspicions of poor quality of online courses
Scott Therkalsen	Foreign Travel (Guatemala) Sp '10	Increased regional knowledge to be used in course presentation
Scott Therkalsen	Foreign Travel (Thailand, Laos, Cambodia) Sum '09	Increased regional knowledge to be used in course presentation
Scott Therkalsen	Foreign Travel (Peru) Sp '09	Increased regional knowledge to be used in course presentation

APPENDIX 10

Sabbaticals, Conference, Workshop and Staff Development Activities

Name	Activity	Relevance
Tim Cliffe	LA Nat'l Weather Service /Malibu Fire Flex trip - F 12 – Co-Organizer	1) Former Met student = LA Lead Forecaster; 2) Fire-ecology for Field Class
Tim Cliffe	LA Oil/Faulted Landscape Flex trip – S 12 - Organizer	Enhance Field Class use of Monterey Shale(Oil) and Catalina Blue Schist
Tim Cliffe	Native Oaks of San Diego Co Flex trip – F 11 - Organizer	Encourage integrated-use of genus *Quercus* for all Field Class weekends
Tim Cliffe	San Diego's Rivers/Dec'10 Flood Flex trip – S 11 - Organizer	Share knowledge of real-time hydrologic data below GC (Mast Rd)
Tim Cliffe	Orange Co. Groundwater Flex trip F 10 - Organizer	Get cutting-edge aquifer/recycling data/photos for Geology Class
Tim Cliffe	Hydrodiversity of Salton Trough Flex trip S 09 - Organizer	Update on hydro effects of water-transfer to SD for all ES Classes
Tim Cliffe	CA Geographical Society Conference (Davis) - S 12	Sacramento River Hydrology: expert field trip for Geology Class
Tim Cliffe	CA Geographical Society Conference (Bishop) - S 11	Paleo-hydrology of US West (via tufa/forest dating by Berkeley) for E.Sierra Field Class
Tim Cliffe	CA Geographical Society Conference (Fullerton) - S 10	Establish connections to Orange Co geology/hydro sites & geographers
Tim Cliffe	Anza-Borrego NHA: Desert Ecology Symposium – F 12	Updated taxonomy of desert-flora (*Jepson-2*) w/ Jon Rebman (SDNHM)
Tim Cliffe	Geology of UK (Siccar Pt/Hutton's Section/Jurassic Coast)-Sum 11	Visit the field-sites that replaced Creationism w/ a Rock Cycle & Uniformitarianism
Tim Cliffe	Geomorphology of the S. Orange Co Coast – S 10	1-Day expert Field Trip (w/ CSU Fullerton) for Field Class
Tim Cliffe	USGS Central U.S. Water Data Conf. (Omaha, NE) – S 10	1-Wk training: 1) indirect flood-surveying, 2) sonar instrumentation
Tim Cliffe	NASA Stennis Space Center / Hydrologic Inst. Fac. – S 08	1-Wk USGS electronics-training for continuous hydro data-collection
Tim Cliffe	Field Class: "E Sierra Shear Zone," Cerro Coso College – F 08	Geology Field Class – useful to all my ES classes inc. E Sierra Field Class
Judd Curran	LA's Faulted Landscape Flex trip – Sp '12	Developed LA basin oil/faulting material for Geog 170

APPENDIX 10

Sabbaticals, Conference, Workshop and Staff Development Activities

Judd Curran	Native Oaks of San Diego County Flex trip – Fa'11	Developed integration of Quercus into 150 field class
Judd Curran	San Diego's Rivers and Creeks Flex trip – Sp '11	Hydrology topics relevant to field course and Geog 120
Judd Curran	Orange County Groundwater Flex trip Fa '10	Hydrology topics relevant to Geog 120,170, and field course
Judd Curran	Hydrodiversity of the Salton Trough Flex trip Sp '09	Water issues and politics relevant to Geog 170, field course
Judd Curran	CA Geographical Society Conference (Davis) - Sp 12	Sacramento River Hydrology: expert field trip for Geog 170
Judd Curran	CA Geographical Society Conference (Bishop) – Sp 11	Sierra Snow Survey Program (Jeff Dozier) and Bishop Tuff (Bob Drake, Geologist- Berkeley Geochron Center): For Geog 176
Judd Curran	CA Geog Society Conference (Fullerton) Sp 10	Peer interaction and knowledge of field area
Judd Curran	CA Geog Society Conference (Chico) - Sp 08	Geology and natural vegetation of Sierran Foothills: Geog 170
Judd Curran	CA Geog Society Conference (Anza-Borrego) - Sp 07	Earthquake Faults/Hot Springs – Don Barrie – all classes
Judd Curran	SDSU Geotech Conference Su 09	Advancements in Geospatial Technologies: For Geog 104 (GIS)
Judd Curran	Field Class: "E Sierra Shear Zone," Cerro Coso College Fa 08	Geology Field Class – useful to most of my classes inc. Geog/geol 176
Judd Curran	Anza-Borrego Foundation/UC Irvine: Desert Ecology Symposium – Fa 12	Updated taxonomy of desert-flora (*Jepson-2*) w/ Jon Rebman (SDNHM)
Judd Curran	Geol. Field Studies of CA Coastal Areas: Catalina Fa 07	In depth course on Geology of CA – for field courses & Geog170
Judd Curran	SDCWA/CADWR State Water Project Tour Fa 12	Feather River to Bay Delta Hydro Infrastructure: All classes
Judd Curran	SDCWA/MWD Colorado Aqueduct Tour Fa 12	CO River to DVL, and local Hydro Infrastructure: All Classes
Judd Curran	ASCCC Teaching Institute Sp 07	Teaching methods workshop: All Classes
Judd Curran	COMET/NCAR/NOAA/NESDIS/GOES-R Faculty Course Su 11	Integrating satellite data/products into all geoscience courses
Judd Curran	Penn State Weather Forecasting Cert Prog Su 10 to Fa 11	Cert. in Weather Forecasting Earned Dec 2011: For all courses

APPENDIX 10

Sabbaticals, Conference, Workshop and Staff Development Activities

Judd Curran	18-Day Travel to Ecuador: Su 10	Andean Volcanics and Amazon Rainforest: Geog 120
Judd Curran	Geology of Nat'l Parks course: Sp 09	Geologic concepts (incl. Wilson Cycle): for all courses
Judd Curran	Cert. in Online Teaching Sp 08 to Fa 08	Cerro Coso Comm. College – for online course development
Judd Curran	Hist 445 at SDSU – CA History Fa 07	Ca History topics developed and used in Geog 170
Judd Curran	12-Day Travel to Costa Rica: Su 07	Volcanics and Tropical Forest Ecosystems: Geog 120
Judd Curran	10-Day Travel to South Korea: Jan 07	Physical landscape of Korean Peninsula: Geog 106, 120
Judd Curran	SDGE Energy Forum/SmartGrid Summit Sp 12	Energy development and SmartGrid: Geog 104,170, Flex trip
Judd Curran	GC Theater Arts Benefit Participant Fa 12	Actor: Adult Evening with Shel Silverstein: for outreach

APPENDIX 11 –

GROSSMONT WSCH ANALYSIS REPORT

Grossmont College
Earth Sciences

Earned Weekly Student Contact Hours (WSCH)

	FL 2006	SP 2007	FL 2007	SP 2008	FL 2008	SP 2009	FL 2009	SP 2010	FL 2010	SP 2011	FL 2011	SP 2012	FL 2012
Geography	1713	1755	1728	1957	1833	2107	2358	2609	2520	2456	2421	2312	2586
Geology	759	612	839	861	740	887	1029	969	1074	957	931	970	1023
Oceanography	639	708	663	528	693	594	732	849	543	801	726	669	546
Totals	**3111**	**3075**	**3230**	**3346**	**3266**	**3588**	**4119**	**4427**	**4137**	**4214**	**4078**	**3951**	**4155**

Earned Weekly Student Contact Hours (WSCH) / Full Time Equivalent Faculty (FTEF)

	FL 2006	SP 2007	FL 2007	SP 2008	FL 2008	SP 2009	FL 2009	SP 2010	FL 2010	SP 2011	FL 2011	SP 2012	FL 2012
Geography	444.93	461.84	473.42	479.3	482.37	491.94	612.47	663.36	690.41	624.46	691.71	645.27	708.49
Geology	399.47	408	426.53	420	376.21	406.28	582.34	570	692.9	617.42	681.05	543.94	721.95
Oceanography	473.33	472	491.11	391.11	513.33	516.52	636.52	628.89	724	593.33	764.21	704.21	728

Total Full Time Equivalent Faculty (FTEF)

	FL 2006	SP 2007	FL 2007	SP 2008	FL 2008	SP 2009	FL 2009	SP 2010	FL 2010	SP 2011	FL 2011	SP 2012	FL 2012
Geography	3.85	3.8	3.65	4.083	3.8	4.283	3.85	3.933	3.65	3.933	3.5	3.583	3.65
Geology	1.9	1.5	1.967	2.05	1.967	2.183	1.767	1.7	1.55	1.55	1.367	1.783	1.417
Oceanography	1.35	1.5	1.35	1.35	1.35	1.15	1.15	1.35	0.75	1.35	0.95	0.95	0.75
Totals	**7.1**	**6.8**	**6.967**	**7.483**	**7.117**	**7.616**	**6.767**	**6.983**	**5.95**	**6.833**	**5.817**	**6.316**	**5.817**

FALL 2012

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
	GEOG								
		220600	GEOG 106	0.600	420.00	700.00	426.00	710.00	101.43
		220600	GEOG 120	1.800	1,350.00	750.00	1,425.00	791.67	105.56
		220600	GEOG 121	0.450	288.00	640.00	207.00	460.00	71.88
		220600	GEOG 130	0.400	240.00	600.00	246.00	615.00	102.50
		220600	GEOG 140	0.200	150.00	750.00	159.00	795.00	106.00
		220600	GEOG 170	0.200	120.00	600.00	123.00	615.00	102.50
			GEOG Total	**3.650**	**2,568.00**	**703.56**	**2,586.00**	**708.49**	**100.70**
	GEOL								
		191400	GEOL 104	0.200	150.00	750.00	144.00	720.00	96.00
		191400	GEOL 110	0.800	600.00	750.00	624.00	780.00	104.00
		191400	GEOL 111	0.150	96.00	640.00	87.00	580.00	90.63
		191400	GEOL 163	0.067	19.00	283.58	15.00	223.88	78.95
		191400	GEOL 230	0.200	150.00	750.00	153.00	765.00	102.00
			GEOL Total	**1.417**	**1,015.00**	**716.30**	**1,023.00**	**721.95**	**100.79**
	HED								
		083700	HED 105	0.134	100.00	746.27	88.00	656.72	88.00
		083700	HED 120	1.800	1,995.00	1,108.33	1,953.00	1,085.00	97.89
		083700	HED 155	0.800	675.00	843.75	663.00	828.75	98.22
		083700	HED 158	0.400	447.00	1,117.50	417.00	1,042.50	93.29
		083700	HED 201	0.400	300.00	750.00	303.00	757.50	101.00
		083700	HED 255	0.200	150.00	750.00	141.00	705.00	94.00
			HED Total	**3.734**	**3,667.00**	**982.06**	**3,565.00**	**954.74**	**97.22**
	MATH								
		170100	MATH 088	2.136	1,280.00	599.25	1,404.00	657.30	109.69
		170100	MATH 090	6.993	4,296.00	614.33	4,764.00	681.25	110.89
		170100	MATH 097	0.200	120.00	600.00	102.00	510.00	85.00
		170100	MATH 103	3.200	2,325.00	726.56	2,313.00	722.81	99.48
		170100	MATH 110	4.995	3,896.00	779.98	4,044.00	809.61	103.80

FALL 2012

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 120	1.400	960.00	685.71	948.00	677.14	98.75
		170100	MATH 125	0.250	160.00	640.00	148.00	592.00	92.50
		170100	MATH 160	3.600	2,685.00	745.83	2,745.00	762.50	102.23
		170100	MATH 170	0.600	420.00	700.00	402.00	670.00	95.71
		170100	MATH 175	1.602	1,160.00	724.09	1,100.00	686.64	94.83
		170100	MATH 176	1.600	1,140.00	712.50	1,158.00	723.75	101.58
		170100	MATH 178	1.068	740.00	692.88	768.00	719.10	103.78
		170100	MATH 180	1.998	1,500.00	750.75	1,525.00	763.26	101.67
		170100	MATH 245	0.200	90.00	450.00	66.00	330.00	73.33
		170100	MATH 280	1.068	760.00	711.61	700.00	655.43	92.11
		170100	MATH 281	0.534	376.00	704.12	312.00	584.27	82.98
		170100	MATH 284	0.200	90.00	450.00	90.00	450.00	100.00
		170100	MATH 285	0.200	150.00	750.00	147.00	735.00	98.00
			MATH Total	**31.844**	**22,148.00**	**695.52**	**22,736.00**	**713.98**	**102.65**
	OCEA								
		191900	OCEA 112	0.600	450.00	750.00	450.00	750.00	100.00
		191900	OCEA 113	0.150	96.00	640.00	96.00	640.00	100.00
			OCEA Total	**0.750**	**546.00**	**728.00**	**546.00**	**728.00**	**100.00**
	PHYC								
		190200	PHYC 110	0.700	384.00	548.57	438.00	625.71	114.06
		190200	PHYC 130	0.350	192.00	548.57	210.00	600.00	109.38
		190200	PHYC 131	0.350	192.00	548.57	90.00	257.14	46.88
		190200	PHYC 140	1.050	576.00	548.57	612.00	582.86	106.25
		190200	PHYC 240	0.350	192.00	548.57	222.00	634.29	115.63
		190200	PHYC 241	0.350	192.00	548.57	72.00	205.71	37.50
			PHYC Total	**3.150**	**1,728.00**	**548.57**	**1,644.00**	**521.90**	**95.14**
	PSC								
		190100	PSC 100	0.200	132.00	660.00	117.00	585.00	88.64
		190100	PSC 110	0.800	600.00	750.00	573.00	716.25	95.50

SPRING 2012

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		083500	ES 155B	0.222	160.00	720.72	144.00	648.65	90.00
		083500	ES 170A	0.222	160.00	720.72	198.00	891.89	123.75
		083500	ES 171A	0.111	72.00	648.65	72.00	648.65	100.00
		083500	ES 175A	0.222	144.00	648.65	134.00	603.60	93.06
		083500	ES 180	0.111	90.00	810.81	82.00	738.74	91.11
		083500	ES 185A	0.167	120.00	718.56	126.00	754.49	105.00
		083500	ES 200	0.167	75.00	449.10	78.00	467.07	104.00
		083500	ES 201	0.334	300.00	898.20	243.00	727.54	81.00
		083550	ES 203	0.555	300.00	540.54	320.00	576.58	106.67
		083550	ES 206	1.110	500.00	450.45	260.00	234.23	52.00
		083550	ES 207	0.222	100.00	450.45	72.00	324.32	72.00
		083550	ES 208	0.111	70.00	630.63	60.00	540.54	85.71
		083550	ES 210	0.555	250.00	450.45	200.00	360.36	80.00
		083550	ES 214	0.222	200.00	900.90	178.00	801.80	89.00
		083550	ES 215	0.555	250.00	450.45	150.00	270.27	60.00
		083550	ES 219	0.111	60.00	540.54	60.00	540.54	100.00
		083550	ES 221	1.110	500.00	450.45	570.00	513.51	114.00
		083550	ES 224	1.110	500.00	450.45	290.00	261.26	58.00
		083550	ES 230	0.555	250.00	450.45	150.00	270.27	60.00
		083550	ES 231	0.111	50.00	450.45	58.00	522.52	116.00
		083550	ES 240	0.000	0.00	0	10.00	0	0
		083500	ES 250	0.133	120.00	902.26	98.00	736.84	81.67
		083500	ES 255	0.250	100.00	400.00	112.00	448.00	112.00
		083500	ES 290	0.167	75.00	449.10	48.00	287.43	64.00
		083500	ES 293	0.183	150.00	819.67	60.00	327.87	40.00
		083500	ES 294	0.200	150.00	750.00	60.00	300.00	40.00
			ES Total	**17.550**	**10,961.00**	**624.56**	**9,594.00**	**546.67**	**87.53**
	GEOG								
		220600	GEOG 104	0.283	165.00	583.04	125.00	441.70	75.76

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SPRING 2012

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		220600	GEOG 106	0.600	450.00	750.00	435.00	725.00	96.67
		220600	GEOG 120	1.600	1,200.00	750.00	1,155.00	721.88	96.25
		220600	GEOG 121	0.300	180.00	600.00	135.00	450.00	75.00
		220600	GEOG 130	0.600	360.00	600.00	342.00	570.00	95.00
		220600	GEOG 170	0.200	120.00	600.00	120.00	600.00	100.00
			GEOG Total	**3.583**	**2,475.00**	**690.76**	**2,312.00**	**645.27**	**93.41**
	GEOL								
		040100	GEOL 150	0.283	130.00	459.04	115.00	406.07	88.46
		191400	GEOL 104	0.200	150.00	750.00	111.00	555.00	74.00
		191400	GEOL 110	0.800	600.00	750.00	570.00	712.50	95.00
		191400	GEOL 111	0.150	96.00	640.00	66.00	440.00	68.75
		191400	GEOL 121	0.350	192.00	548.57	108.00	308.57	56.25
			GEOL Total	**1.783**	**1,168.00**	**655.00**	**970.00**	**543.97**	**83.05**
	HED								
		083700	HED 105	0.134	100.00	746.27	88.00	656.72	88.00
		083700	HED 120	2.000	1,860.00	930.00	1,806.00	903.00	97.10
		083700	HED 155	1.200	915.00	762.50	816.00	680.00	89.18
		083700	HED 158	0.400	390.00	975.00	357.00	892.50	91.54
		083700	HED 201	0.200	150.00	750.00	150.00	750.00	100.00
		083700	HED 255	0.200	150.00	750.00	147.00	735.00	98.00
			HED Total	**4.134**	**3,565.00**	**862.36**	**3,364.00**	**813.74**	**94.36**
	MATH								
		170100	MATH 088	2.136	1,300.00	608.61	1,376.00	644.19	105.85
		170100	MATH 090	6.660	4,111.00	617.27	4,554.00	683.78	110.78
		170100	MATH 097	0.200	135.00	675.00	105.00	525.00	77.78
		170100	MATH 103	3.200	2,310.00	721.88	2,130.00	665.63	92.21
		170100	MATH 110	4.662	3,546.00	760.62	3,647.00	782.28	102.85
		170100	MATH 120	2.000	1,350.00	675.00	1,212.00	606.00	89.78
		170100	MATH 125	0.250	180.00	720.00	160.00	640.00	88.89

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SPRING 2012

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 126	0.250	180.00	720.00	128.00	512.00	71.11
		170100	MATH 128	0.100	67.50	675.00	48.00	480.00	71.11
		170100	MATH 160	3.800	2,670.00	702.63	2,586.00	680.53	96.85
		170100	MATH 170	0.600	420.00	700.00	387.00	645.00	92.14
		170100	MATH 175	1.602	1,080.00	674.16	1,028.00	641.70	95.19
		170100	MATH 176	1.600	1,110.00	693.75	1,062.00	663.75	95.68
		170100	MATH 178	1.602	1,100.00	686.64	1,056.00	659.18	96.00
		170100	MATH 180	1.665	1,225.00	735.74	1,155.00	693.69	94.29
		170100	MATH 245	0.200	90.00	450.00	81.00	405.00	90.00
		170100	MATH 280	1.335	880.00	659.18	748.00	560.30	85.00
		170100	MATH 281	0.534	380.00	711.61	376.00	704.12	98.95
		170100	MATH 284	0.200	90.00	450.00	123.00	615.00	136.67
		170100	MATH 285	0.200	135.00	675.00	126.00	630.00	93.33
			MATH Total	**32.796**	**22,359.50**	**681.78**	**22,088.00**	**673.50**	**98.79**
	OCEA								
		191900	OCEA 112	0.800	600.00	750.00	588.00	735.00	98.00
		191900	OCEA 113	0.150	96.00	640.00	81.00	540.00	84.38
			OCEA Total	**0.950**	**696.00**	**732.63**	**669.00**	**704.21**	**96.12**
	PHYC								
		190200	PHYC 110	1.050	576.00	548.57	570.00	542.86	98.96
		190200	PHYC 130	0.350	192.00	548.57	198.00	565.71	103.13
		190200	PHYC 140	1.050	576.00	548.57	606.00	577.14	105.21
		190200	PHYC 240	0.350	192.00	548.57	216.00	617.14	112.50
			PHYC Total	**2.800**	**1,536.00**	**548.57**	**1,590.00**	**567.86**	**103.52**
	PSC								
		190100	PSC 100	0.200	144.00	720.00	123.00	615.00	85.42
		190100	PSC 110	0.600	450.00	750.00	474.00	790.00	105.33
		190100	PSC 111	0.150	96.00	640.00	75.00	500.00	78.13

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Fall 2011

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
			ES Total	**18.085**	**14,341.00**	**792.98**	**10,884.00**	**601.82**	**75.89**
	GEOG								
		220600	GEOG 106	0.600	390.00	650.00	399.00	665.00	102.31
		220600	GEOG 120	1.800	1,350.00	750.00	1,383.00	768.33	102.44
		220600	GEOG 121	0.300	180.00	600.00	147.00	490.00	81.67
		220600	GEOG 130	0.400	240.00	600.00	246.00	615.00	102.50
		220600	GEOG 140	0.200	120.00	600.00	123.00	615.00	102.50
		220600	GEOG 170	0.200	120.00	600.00	123.00	615.00	102.50
			GEOG Total	**3.500**	**2,400.00**	**685.71**	**2,421.00**	**691.71**	**100.88**
	GEOL								
		191400	GEOL 104	0.200	150.00	750.00	147.00	735.00	98.00
		191400	GEOL 110	0.800	600.00	750.00	621.00	776.25	103.50
		191400	GEOL 111	0.300	192.00	640.00	144.00	480.00	75.00
		191400	GEOL 164	0.067	19.00	283.58	19.00	283.58	100.00
			GEOL Total	**1.367**	**961.00**	**703.00**	**931.00**	**681.05**	**96.88**
	HED								
		083700	HED 105	0.067	50.00	746.27	47.00	701.49	94.00
		083700	HED 120	2.000	2,052.00	1,026.00	2,076.00	1,038.00	101.17
		083700	HED 155	1.000	825.00	825.00	732.00	732.00	88.73
		083700	HED 158	0.400	447.00	1,117.50	429.00	1,072.50	95.97
		083700	HED 201	0.400	300.00	750.00	294.00	735.00	98.00
		083700	HED 255	0.200	150.00	750.00	132.00	660.00	88.00
			HED Total	**4.067**	**3,824.00**	**940.25**	**3,710.00**	**912.22**	**97.02**
	MATH								
		170100	MATH 088	2.403	1,252.00	521.02	1,584.00	659.18	126.52
		170100	MATH 090	7.659	4,886.00	637.94	5,620.00	733.78	115.02
		170100	MATH 097	0.200	135.00	675.00	123.00	615.00	91.11
		170100	MATH 103	3.600	2,490.00	691.67	2,589.00	719.17	103.98

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FALL 2011

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 110	5.661	4,071.00	719.13	4,333.00	765.41	106.44
		170100	MATH 120	1.800	1,200.00	666.67	1,077.00	598.33	89.75
		170100	MATH 125	0.250	180.00	720.00	128.00	512.00	71.11
		170100	MATH 160	3.800	2,565.00	675.00	2,658.00	699.47	103.63
		170100	MATH 170	0.600	405.00	675.00	450.00	750.00	111.11
		170100	MATH 175	1.602	1,080.00	674.16	1,084.00	676.65	100.37
		170100	MATH 176	1.600	1,080.00	675.00	1,230.00	768.75	113.89
		170100	MATH 178	1.335	900.00	674.16	900.00	674.16	100.00
		170100	MATH 180	2.331	1,575.00	675.68	1,440.00	617.76	91.43
		170100	MATH 245	0.200	90.00	450.00	87.00	435.00	96.67
		170100	MATH 280	1.068	720.00	674.16	772.00	722.85	107.22
		170100	MATH 281	0.534	360.00	674.16	400.00	749.06	111.11
		170100	MATH 284	0.200	90.00	450.00	87.00	435.00	96.67
		170100	MATH 285	0.200	156.00	780.00	168.00	840.00	107.69
			MATH Total	**35.043**	**23,235.00**	**663.04**	**24,730.00**	**705.70**	**106.43**
	OCEA								
		191900	OCEA 112	0.800	600.00	750.00	621.00	776.25	103.50
		191900	OCEA 113	0.150	96.00	640.00	105.00	700.00	109.38
			OCEA Total	**0.950**	**696.00**	**732.63**	**726.00**	**764.21**	**104.31**
	PHYC								
		190200	PHYC 110	1.050	576.00	548.57	600.00	571.43	104.17
		190200	PHYC 130	0.350	192.00	548.57	204.00	582.86	106.25
		190200	PHYC 140	1.050	576.00	548.57	612.00	582.86	106.25
		190200	PHYC 240	0.350	192.00	548.57	210.00	600.00	109.38
		190200	PHYC 241	0.350	192.00	548.57	84.00	240.00	43.75
			PHYC Total	**3.150**	**1,728.00**	**548.57**	**1,710.00**	**542.86**	**98.96**
	PSC								
		190100	PSC 100	0.200	147.00	735.00	135.00	675.00	91.84
		190100	PSC 110	0.800	600.00	750.00	591.00	738.75	98.50

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Spring 2011

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
			ES Total	**19.704**	**12,458.00**	**632.26**	**11,090.00**	**562.83**	**89.02**
	GEOG								
		220600	GEOG 104	0.283	231.00	816.25	161.00	568.90	69.70
		220600	GEOG 106	0.600	420.00	700.00	390.00	650.00	92.86
		220600	GEOG 120	1.800	1,350.00	750.00	1,263.00	701.67	93.56
		220600	GEOG 121	0.450	270.00	600.00	210.00	466.67	77.78
		220600	GEOG 130	0.600	360.00	600.00	318.00	530.00	88.33
		220600	GEOG 170	0.200	120.00	600.00	114.00	570.00	95.00
			GEOG Total	**3.933**	**2,751.00**	**699.47**	**2,456.00**	**624.46**	**89.28**
	GEOL								
		191400	GEOL 104	0.200	150.00	750.00	120.00	600.00	80.00
		191400	GEOL 110	1.000	750.00	750.00	669.00	669.00	89.20
		191400	GEOL 111	0.150	96.00	640.00	96.00	640.00	100.00
		191400	GEOL 220	0.200	96.00	480.00	72.00	360.00	75.00
			GEOL Total	**1.550**	**1,092.00**	**704.52**	**957.00**	**617.42**	**87.64**
	HED								
		083700	HED 105	0.134	100.00	746.27	82.00	611.94	82.00
		083700	HED 120	2.000	1,995.00	997.50	1,962.00	981.00	98.35
		083700	HED 155	1.400	960.00	685.71	780.00	557.14	81.25
		083700	HED 158	0.400	450.00	1,125.00	384.00	960.00	85.33
		083700	HED 201	0.200	150.00	750.00	159.00	795.00	106.00
		083700	HED 255	0.200	150.00	750.00	120.00	600.00	80.00
			HED Total	**4.334**	**3,805.00**	**877.94**	**3,487.00**	**804.57**	**91.64**
	MATH								
		170100	MATH 080	0.266	180.00	676.69	180.00	676.69	100.00
		170100	MATH 088	1.602	912.00	569.29	968.00	604.24	106.14
		170100	MATH 090	6.660	4,406.00	661.56	4,438.00	666.37	100.73
		170100	MATH 097	0.200	135.00	675.00	117.00	585.00	86.67

Spring 2011

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 103	3.600	2,430.00	675.00	2,466.00	685.00	101.48
		170100	MATH 110	5.328	3,846.00	721.85	3,819.00	716.78	99.30
		170100	MATH 120	2.000	1,320.00	660.00	1,245.00	622.50	94.32
		170100	MATH 125	0.250	180.00	720.00	160.00	640.00	88.89
		170100	MATH 126	0.250	180.00	720.00	72.00	288.00	40.00
		170100	MATH 160	4.200	2,835.00	675.00	2,886.00	687.14	101.80
		170100	MATH 170	0.600	405.00	675.00	402.00	670.00	99.26
		170100	MATH 175	1.602	1,080.00	674.16	1,036.00	646.69	95.93
		170100	MATH 176	1.600	1,080.00	675.00	1,158.00	723.75	107.22
		170100	MATH 177	0.283	225.00	795.05	35.00	123.67	15.56
		170100	MATH 178	2.136	1,440.00	674.16	1,048.00	490.64	72.78
		170100	MATH 180	2.331	1,575.00	675.68	1,185.00	508.37	75.24
		170100	MATH 245	0.200	90.00	450.00	66.00	330.00	73.33
		170100	MATH 280	1.335	880.00	659.18	836.00	626.22	95.00
		170100	MATH 281	0.534	360.00	674.16	396.00	741.57	110.00
		170100	MATH 284	0.200	90.00	450.00	138.00	690.00	153.33
		170100	MATH 285	0.200	135.00	675.00	123.00	615.00	91.11
			MATH Total	**35.377**	**23,784.00**	**672.30**	**22,774.00**	**643.75**	**95.75**
	OCEA								
		191900	OCEA 112	1.200	870.00	725.00	705.00	587.50	81.03
		191100	OCEA 113	0.150	96.00	640.00	96.00	640.00	100.00
			OCEA Total	**1.350**	**966.00**	**715.56**	**801.00**	**593.33**	**82.92**
	PHYC								
		190200	PHYC 110	1.050	576.00	548.57	522.00	497.14	90.63
		190200	PHYC 130	0.350	192.00	548.57	162.00	462.86	84.38
		190200	PHYC 131	0.350	96.00	274.29	39.00	111.43	40.63
		190200	PHYC 140	1.400	768.00	548.57	684.00	488.57	89.06
		190200	PHYC 240	0.350	192.00	548.57	198.00	565.71	103.13
			PHYC Total	**3.500**	**1,824.00**	**521.14**	**1,605.00**	**458.57**	**87.99**

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Fall 2010

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		083500	ES 291	0.200	150.00	750.00	99.00	495.00	66.00
		083500	ES 292	0.200	150.00	750.00	108.00	540.00	72.00
			ES Total	**19.968**	**15,717.00**	**787.11**	**11,969.00**	**599.41**	**76.15**
	GEOG								
		220600	GEOG 106	0.600	390.00	650.00	399.00	665.00	102.31
		220600	GEOG 120	1.800	1,350.00	750.00	1,386.00	770.00	102.67
		220600	GEOG 121	0.450	270.00	600.00	207.00	460.00	76.67
		220600	GEOG 130	0.400	228.00	570.00	246.00	615.00	107.89
		220600	GEOG 140	0.200	120.00	600.00	120.00	600.00	100.00
		220600	GEOG 170	0.200	150.00	750.00	162.00	810.00	108.00
			GEOG Total	**3.650**	**2,508.00**	**687.12**	**2,520.00**	**690.41**	**100.48**
	GEOL								
		191400	GEOL 104	0.400	300.00	750.00	297.00	742.50	99.00
		191400	GEOL 110	1.000	750.00	750.00	684.00	684.00	91.20
		191400	GEOL 111	0.150	96.00	640.00	93.00	620.00	96.88
			GEOL Total	**1.550**	**1,146.00**	**739.35**	**1,074.00**	**692.90**	**93.72**
	HED								
		083700	HED 101	0.200	150.00	750.00	90.00	450.00	60.00
		083700	HED 105	0.067	50.00	746.27	49.00	731.34	98.00
		083700	HED 120	2.000	1,950.00	975.00	1,887.00	943.50	96.77
		083700	HED 155	1.200	855.00	712.50	813.00	677.50	95.09
		083700	HED 158	0.400	447.00	1,117.50	429.00	1,072.50	95.97
		083700	HED 201	0.400	300.00	750.00	252.00	630.00	84.00
		083700	HED 255	0.200	150.00	750.00	105.00	525.00	70.00
			HED Total	**4.467**	**3,902.00**	**873.52**	**3,625.00**	**811.51**	**92.90**
	MATH								
		170100	MATH 080	0.266	180.00	676.69	170.00	639.10	94.44
		170100	MATH 088	1.869	1,200.00	642.05	1,164.00	622.79	97.00

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Fall 2010

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 090	6.993	4,596.00	657.23	4,615.00	659.95	100.41
		170100	MATH 090L	0.150	120.00	800.00	30.00	200.00	25.00
		170100	MATH 097	0.200	135.00	675.00	129.00	645.00	95.56
		170100	MATH 103	3.800	2,625.00	690.79	2,949.00	776.05	112.34
		170100	MATH 110	5.994	4,296.00	716.72	4,502.00	751.08	104.80
		170100	MATH 088L	0.150	120.00	800.00	57.00	380.00	47.50
		170100	MATH 120	1.800	1,200.00	666.67	1,245.00	691.67	103.75
		170100	MATH 125	0.500	360.00	720.00	184.00	368.00	51.11
		170100	MATH 126	0.250	180.00	720.00	84.00	336.00	46.67
		170100	MATH 128	0.100	67.50	675.00	30.00	300.00	44.44
		170100	MATH 160	3.600	2,430.00	675.00	2,583.00	717.50	106.30
		170100	MATH 170	0.600	405.00	675.00	399.00	665.00	98.52
		170100	MATH 175	1.602	1,060.00	661.67	1,160.00	724.09	109.43
		170100	MATH 176	1.600	1,080.00	675.00	1,182.00	738.75	109.44
		170100	MATH 177	0.283	225.00	795.05	45.00	159.01	20.00
		170100	MATH 178	1.602	1,080.00	674.16	1,040.00	649.19	96.30
		170100	MATH 180	2.331	1,575.00	675.68	1,675.00	718.58	106.35
		170100	MATH 245	0.200	90.00	450.00	105.00	525.00	116.67
		170100	MATH 280	1.335	828.00	620.22	768.00	575.28	92.75
		170100	MATH 281	0.534	360.00	674.16	388.00	726.59	107.78
		170100	MATH 284	0.200	90.00	450.00	96.00	480.00	106.67
		170100	MATH 285	0.200	135.00	675.00	150.00	750.00	111.11
			MATH Total	**36.159**	**24,437.50**	**675.83**	**24,750.00**	**684.48**	**101.28**
	OCEA								
		191900	OCEA 112	0.600	450.00	750.00	456.00	760.00	101.33
		191900	OCEA 113	0.150	96.00	640.00	87.00	580.00	90.63
			OCEA Total	**0.750**	**546.00**	**728.00**	**543.00**	**724.00**	**99.45**
	PHYC								
		190200	PHYC 110	1.050	576.00	548.57	576.00	548.57	100.00

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Spring 2010

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		083550	ES 219	0.111	60.00	540.54	40.00	360.36	66.67
		083550	ES 221	1.110	500.00	450.45	510.00	459.46	102.00
		083550	ES 224	1.110	500.00	450.45	260.00	234.23	52.00
		083550	ES 230	0.555	250.00	450.45	140.00	252.25	56.00
		083550	ES 231	0.111	50.00	450.45	34.00	306.31	68.00
		083550	ES 240	0.000	0.00	0	20.00	0	0
		083500	ES 250	0.133	150.00	1,127.82	136.00	1,022.56	90.67
		083500	ES 253	0.484	396.00	818.18	312.00	644.63	78.79
		083500	ES 255	0.550	300.00	545.45	292.00	530.91	97.33
		083500	ES 290	0.167	60.00	359.28	66.00	395.21	110.00
		083500	ES 293	0.133	150.00	1,127.82	60.00	451.13	40.00
		083500	ES 294	0.200	150.00	750.00	57.00	285.00	38.00
		083500	ES 299B	0.117	80.00	683.76	68.00	581.20	85.00
			ES Total	**21.757**	**13,957.00**	**641.49**	**11,889.00**	**546.44**	**85.18**
	GEOG								
		220600	GEOG 104	0.283	165.00	583.04	155.00	547.70	93.94
		220600	GEOG 106	0.600	426.00	710.00	444.00	740.00	104.23
		220600	GEOG 120	1.800	1,323.00	735.00	1,287.00	715.00	97.28
		220600	GEOG 121	0.450	270.00	600.00	249.00	553.33	92.22
		220600	GEOG 130	0.600	396.00	660.00	366.00	610.00	92.42
		220600	GEOG 170	0.200	132.00	660.00	108.00	540.00	81.82
			GEOG Total	**3.933**	**2,712.00**	**689.55**	**2,609.00**	**663.36**	**96.20**
	GEOL								
		191400	GEOL 104	0.200	147.00	735.00	144.00	720.00	97.96
		191400	GEOL 110	1.000	678.00	678.00	648.00	648.00	95.58
		191400	GEOL 111	0.150	96.00	640.00	99.00	660.00	103.13
		191400	GEOL 121	0.350	192.00	548.57	78.00	222.86	40.63
			GEOL Total	**1.700**	**1,113.00**	**654.71**	**969.00**	**570.00**	**87.06**

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Spring 2010

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 281	0.534	360.00	674.16	368.00	689.14	102.22
		170100	MATH 284	0.200	90.00	450.00	144.00	720.00	160.00
		170100	MATH 285	0.200	135.00	675.00	120.00	600.00	88.89
		170100	MATH 299B	0.133	90.00	676.69	38.00	285.71	42.22
			MATH Total	**36.560**	**24,389.00**	**667.10**	**23,189.50**	**634.29**	**95.08**
	OCEA								
		191900	OCEA 112	1.200	792.00	660.00	753.00	627.50	95.08
		191100	OCEA 113	0.150	96.00	640.00	96.00	640.00	100.00
			OCEA Total	**1.350**	**888.00**	**657.78**	**849.00**	**628.89**	**95.61**
	PHYC								
		190200	PHYC 110	1.050	576.00	548.57	612.00	582.86	106.25
		190200	PHYC 130	0.350	192.00	548.57	258.00	737.14	134.38
		190200	PHYC 131	0.350	96.00	274.29	33.00	94.29	34.38
		190200	PHYC 140	1.050	576.00	548.57	726.00	691.43	126.04
		190200	PHYC 240	0.350	192.00	548.57	204.00	582.86	106.25
			PHYC Total	**3.150**	**1,632.00**	**518.10**	**1,833.00**	**581.90**	**112.32**
	PSC								
		190100	PSC 100	0.200	135.00	675.00	138.00	690.00	102.22
		190100	PSC 110	0.800	555.00	693.75	591.00	738.75	106.49
		190100	PSC 111	0.300	192.00	640.00	141.00	470.00	73.44
			PSC Total	**1.300**	**882.00**	**678.46**	**870.00**	**669.23**	**98.64**
	SCI								
		493013	SCI 110	1.400	930.00	664.29	786.00	561.43	84.52
			SCI Total	**1.400**	**930.00**	**664.29**	**786.00**	**561.43**	**84.52**
		******** Division Totals**		**104.252**	**68,134.00**	**653.55**	**65,798.00**	**631.14**	**96.57**

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Fall 2009

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		083500	ES 225	0.222	100.00	450.45	56.00	252.25	56.00
		083550	ES 230	0.555	200.00	360.36	180.00	324.32	90.00
		083500	ES 231	0.111	50.00	450.45	34.00	306.31	68.00
		083550	ES 233	1.110	500.00	450.45	410.00	369.37	82.00
		083500	ES 240	0.000	0.00	0	20.00	0	0
		083500	ES 250	0.133	140.00	1,052.63	144.00	1,082.71	102.86
		083500	ES 253	0.484	400.00	826.45	248.00	512.40	62.00
		083500	ES 255	0.300	200.00	666.67	200.00	666.67	100.00
		083500	ES 262	0.111	150.00	1,351.35	118.00	1,063.06	78.67
		083500	ES 263	0.111	150.00	1,351.35	100.00	900.90	66.67
		083500	ES 290	0.167	108.00	646.71	60.00	359.28	55.56
		083500	ES 291	0.133	100.00	751.88	68.00	511.28	68.00
		083500	ES 292	0.200	150.00	750.00	105.00	525.00	70.00
		083500	ES 299A	0.033	120.00	3,636.36	25.00	757.58	20.83
			ES Total	**22.070**	**17,214.00**	**779.97**	**12,678.00**	**574.44**	**73.65**
	GEOG								
		220600	GEOG 106	0.600	444.00	740.00	393.00	655.00	88.51
		220600	GEOG 120	1.800	1,323.00	735.00	1,272.00	706.67	96.15
		220600	GEOG 121	0.450	270.00	600.00	177.00	393.33	65.56
		220600	GEOG 130	0.600	372.00	620.00	342.00	570.00	91.94
		220600	GEOG 140	0.200	147.00	735.00	39.00	195.00	26.53
		220600	GEOG 170	0.200	132.00	660.00	135.00	675.00	102.27
			GEOG Total	**3.850**	**2,688.00**	**698.18**	**2,358.00**	**612.47**	**87.72**
	GEOL								
		191400	GEOL 104	0.400	279.00	697.50	267.00	667.50	95.70
		191400	GEOL 110	1.000	678.00	678.00	645.00	645.00	95.13
		191400	GEOL 111	0.300	192.00	640.00	102.00	340.00	53.13
		191400	GEOL 164	0.067	20.00	298.51	15.00	223.88	75.00
			GEOL Total	**1.767**	**1,169.00**	**661.57**	**1,029.00**	**582.34**	**88.02**

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Fall 2009

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 281	0.534	360.00	674.16	396.00	741.57	110.00
		170100	MATH 284	0.200	90.00	450.00	75.00	375.00	83.33
		170100	MATH 285	0.200	135.00	675.00	102.00	510.00	75.56
		170100	MATH 299B	0.133	90.00	676.69	30.00	225.56	33.33
			MATH Total	**37.625**	**25,358.00**	**673.96**	**24,673.00**	**655.76**	**97.30**
	OCEA								
		191900	OCEA 112	1.000	660.00	660.00	654.00	654.00	99.09
		191900	OCEA 113	0.150	96.00	640.00	78.00	520.00	81.25
			OCEA Total	**1.150**	**756.00**	**657.39**	**732.00**	**636.52**	**96.83**
	PHYC								
		190200	PHYC 110	1.050	576.00	548.57	570.00	542.86	98.96
		190200	PHYC 130	0.350	192.00	548.57	198.00	565.71	103.13
		190200	PHYC 140	1.050	576.00	548.57	648.00	617.14	112.50
		190200	PHYC 240	0.350	192.00	548.57	198.00	565.71	103.13
		190200	PHYC 241	0.350	192.00	548.57	108.00	308.57	56.25
			PHYC Total	**3.150**	**1,728.00**	**548.57**	**1,722.00**	**546.67**	**99.65**
	PSC								
		190100	PSC 110	0.800	555.00	693.75	537.00	671.25	96.76
		190100	PSC 111	0.150	96.00	640.00	69.00	460.00	71.88
			PSC Total	**0.950**	**651.00**	**685.26**	**606.00**	**637.89**	**93.09**
	SCI								
		490100	SCI 110	1.400	720.00	514.29	810.00	578.57	112.50
			SCI Total	**1.400**	**720.00**	**514.29**	**810.00**	**578.57**	**112.50**
		******** Division Totals**		**104.614**	**72,288.00**	**691.00**	**67,257.00**	**642.91**	**93.04**

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SPRING 2009

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		083550	ES 219	0.111	60.00	540.54	44.00	396.40	73.33
		083550	ES 221	1.110	500.00	450.45	550.00	495.50	110.00
		083550	ES 224	1.110	500.00	450.45	260.00	234.23	52.00
		083550	ES 225	0.111	50.00	450.45	10.00	90.09	20.00
		083550	ES 230	0.555	250.00	450.45	110.00	198.20	44.00
		083550	ES 231	0.111	50.00	450.45	32.00	288.29	64.00
		083550	ES 234	0.111	50.00	450.45	46.00	414.41	92.00
		083550	ES 240	0.555	0.00	0.00	30.00	54.05	0
		083500	ES 250	0.133	120.00	902.26	102.00	766.92	85.00
		083500	ES 253	0.726	576.00	793.39	296.00	407.71	51.39
		083500	ES 255	0.550	360.00	654.55	224.00	407.27	62.22
		083500	ES 290	0.167	60.00	359.28	30.00	179.64	50.00
		083500	ES 299B	0.468	320.00	683.76	240.00	512.82	75.00
			ES Total	**24.487**	**15,728.00**	**642.31**	**11,412.00**	**466.05**	**72.56**
	GEOG								
		220600	GEOG 104	0.283	315.00	1,113.07	91.00	321.55	28.89
		220600	GEOG 106	0.600	396.00	660.00	351.00	585.00	88.64
		220600	GEOG 120	1.800	1,320.00	733.33	1,041.00	578.33	78.86
		220600	GEOG 121	0.600	360.00	600.00	228.00	380.00	63.33
		220600	GEOG 130	0.600	399.00	665.00	267.00	445.00	66.92
		220600	GEOG 140	0.200	150.00	750.00	39.00	195.00	26.00
		220600	GEOG 170	0.200	132.00	660.00	90.00	450.00	68.18
			GEOG Total	**4.283**	**3,072.00**	**717.25**	**2,107.00**	**491.94**	**68.59**
	GEOL								
		040100	GEOL 150	0.283	130.00	459.04	125.00	441.38	96.15
		191400	GEOL 104	0.200	144.00	720.00	114.00	570.00	79.17
		191400	GEOL 110	1.200	810.00	675.00	495.00	412.50	61.11
		191400	GEOL 111	0.300	192.00	640.00	84.00	280.00	43.75
		191400	GEOL 220	0.200	96.00	480.00	69.00	345.00	71.88

Spring 2009

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
			GEOL Total	**2.183**	**1,372.00**	**628.44**	**887.00**	**406.28**	**64.65**
	HED								
		130100	HED 155	1.600	1,125.00	703.13	954.00	596.25	84.80
		083700	HED 101	0.200	150.00	750.00	138.00	690.00	92.00
		083700	HED 105	0.134	100.00	746.27	82.00	611.94	82.00
		083700	HED 120	2.200	2,190.00	995.45	1,602.00	728.18	73.15
		083700	HED 158	0.200	222.00	1,110.00	198.00	990.00	89.19
		083700	HED 201	0.200	150.00	750.00	147.00	735.00	98.00
		083700	HED 255	0.200	150.00	750.00	111.00	555.00	74.00
			HED Total	**4.734**	**4,087.00**	**863.33**	**3,232.00**	**682.72**	**79.08**
	MATH								
		170100	MATH 080	0.266	180.00	676.69	148.00	556.39	82.22
		170100	MATH 088	1.869	1,120.00	599.25	824.00	440.88	73.57
		170100	MATH 090	6.593	4,545.00	689.37	3,530.00	535.42	77.67
		170100	MATH 088L	0.300	240.00	800.00	72.00	240.00	30.00
		170100	MATH 090L	0.150	120.00	800.00	33.00	220.00	27.50
		170100	MATH 097	0.400	255.00	637.50	138.00	345.00	54.12
		170100	MATH 103	4.800	3,237.00	674.38	2,553.00	531.88	78.87
		170100	MATH 110	6.260	4,465.00	713.26	3,355.00	535.94	75.14
		170100	MATH 110L	0.150	120.00	800.00	18.00	120.00	15.00
		170100	MATH 120	2.600	1,725.00	663.46	1,269.00	488.08	73.57
		170100	MATH 125	0.500	320.00	640.00	224.00	448.00	70.00
		170100	MATH 126	0.500	360.00	720.00	168.00	336.00	46.67
		170100	MATH 128	0.200	135.00	675.00	75.00	375.00	55.56
		170100	MATH 160	5.400	3,702.00	685.56	3,276.00	606.67	88.49
		170100	MATH 170	0.600	378.00	630.00	297.00	495.00	78.57
		170100	MATH 175	2.136	1,400.00	655.43	896.00	419.48	64.00
		170100	MATH 176	1.600	1,080.00	675.00	1,032.00	645.00	95.56
		170100	MATH 178	2.136	1,440.00	674.16	1,156.00	541.20	80.28

Spring 2009

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 180	2.331	1,550.00	664.95	1,430.00	613.47	92.26
		170100	MATH 245	0.200	90.00	450.00	48.00	240.00	53.33
		170100	MATH 280	1.335	880.00	659.18	644.00	482.40	73.18
		170100	MATH 281	0.534	360.00	674.16	372.00	696.63	103.33
		170100	MATH 284	0.200	90.00	450.00	126.00	630.00	140.00
		170100	MATH 285	0.200	105.00	525.00	84.00	420.00	80.00
			MATH Total	**41.260**	**27,897.00**	**676.13**	**21,768.00**	**527.58**	**78.03**
	OCEA								
		191900	OCEA 112	1.000	663.00	663.00	507.00	507.00	76.47
		191100	OCEA 113	0.150	96.00	640.00	87.00	580.00	90.63
			OCEA Total	**1.150**	**759.00**	**660.00**	**594.00**	**516.52**	**78.26**
	PHYC								
		190200	PHYC 110	1.050	480.00	457.14	372.00	354.29	77.50
		190200	PHYC 130	0.350	192.00	548.57	192.00	548.57	100.00
		190200	PHYC 131	0.350	96.00	274.29	33.00	94.29	34.38
		190200	PHYC 140	1.050	576.00	548.57	552.00	525.71	95.83
		190200	PHYC 240	0.350	192.00	548.57	174.00	497.14	90.63
		190200	PHYC 241	0.350	192.00	548.57	78.00	222.86	40.63
			PHYC Total	**3.500**	**1,728.00**	**493.71**	**1,401.00**	**400.29**	**81.08**
	PSC								
		190100	PSC 110	1.000	690.00	690.00	558.00	558.00	80.87
		190100	PSC 111	0.300	192.00	640.00	120.00	400.00	62.50
			PSC Total	**1.300**	**882.00**	**678.46**	**678.00**	**521.54**	**76.87**
	SCI								
		490100	SCI 110	1.600	1,068.00	667.50	714.00	446.25	66.85
			SCI Total	**1.600**	**1,068.00**	**667.50**	**714.00**	**446.25**	**66.85**
		******** Division Totals**		**115.548**	**76,270.00**	**660.07**	**62,186.00**	**538.18**	**81.53**

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Fall 2008

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		083550	ES 233	1.110	500.00	450.45	460.00	414.41	92.00
		083500	ES 240	0.555	0.00	0.00	10.00	18.02	0
		083500	ES 250	0.133	140.00	1,052.63	118.00	887.22	84.29
		083500	ES 253	0.484	400.00	826.45	172.00	355.37	43.00
		083500	ES 255	0.300	200.00	666.67	200.00	666.67	100.00
		083500	ES 262	0.111	150.00	1,351.35	90.00	810.81	60.00
		083500	ES 263	0.111	150.00	1,351.35	104.00	936.94	69.33
		083500	ES 290	0.167	108.00	646.71	33.00	197.60	30.56
		083500	ES 299	0.366	300.00	819.67	173.00	472.68	57.67
			ES Total	**23.512**	**17,481.00**	**743.49**	**11,200.00**	**476.35**	**64.07**
	GEOG								
		220600	GEOG 106	0.400	294.00	735.00	270.00	675.00	91.84
		220600	GEOG 120	1.800	1,323.00	735.00	1,026.00	570.00	77.55
		220600	GEOG 121	0.600	360.00	600.00	207.00	345.00	57.50
		220600	GEOG 130	0.600	396.00	660.00	222.00	370.00	56.06
		220600	GEOG 140	0.200	72.00	360.00	27.00	135.00	37.50
		220600	GEOG 170	0.200	132.00	660.00	81.00	405.00	61.36
			GEOG Total	**3.800**	**2,577.00**	**678.16**	**1,833.00**	**482.37**	**71.13**
	GEOL								
		191400	GEOL 104	0.400	279.00	697.50	195.00	487.50	69.89
		191400	GEOL 110	1.200	810.00	675.00	447.00	372.50	55.19
		191400	GEOL 111	0.300	192.00	640.00	84.00	280.00	43.75
		191400	GEOL 162	0.067	20.00	298.51	14.00	208.96	70.00
			GEOL Total	**1.967**	**1,301.00**	**661.41**	**740.00**	**376.21**	**56.88**
	HED								
		130100	HED 155	1.600	1,110.00	693.75	1,038.00	648.75	93.51
		083700	HED 101	0.200	127.50	637.50	66.00	330.00	51.76
		083700	HED 105	0.134	100.00	746.27	89.00	664.18	89.00
		083700	HED 120	2.200	2,175.00	988.64	1,785.00	811.36	82.07

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Fall 2008

Grossmont WSCH Analysis by TOPS using Census Enrollment for Program Review

Division	Subject	Top Code	Course	Total FTEF	Max WSCH	Max WSCH/FTEF	Earned WSCH	Earned WSCH/FTEF	% of Max
		170100	MATH 284	0.200	90.00	450.00	84.00	420.00	93.33
		170100	MATH 285	0.200	135.00	675.00	81.00	405.00	60.00
			MATH Total	**40.826**	**27,564.00**	**675.16**	**23,372.50**	**572.49**	**84.79**
	OCEA								
		191900	OCEA 112	1.200	792.00	660.00	627.00	522.50	79.17
		191900	OCEA 113	0.150	96.00	640.00	66.00	440.00	68.75
			OCEA Total	**1.350**	**888.00**	**657.78**	**693.00**	**513.33**	**78.04**
	PHYC								
		190200	PHYC 110	1.050	576.00	548.57	432.00	411.43	75.00
		190200	PHYC 130	0.350	192.00	548.57	162.00	462.86	84.38
		190200	PHYC 140	1.050	576.00	548.57	510.00	485.71	88.54
		190200	PHYC 240	0.350	192.00	548.57	126.00	360.00	65.63
		190200	PHYC 241	0.350	192.00	548.57	54.00	154.29	28.13
			PHYC Total	**3.150**	**1,728.00**	**548.57**	**1,284.00**	**407.62**	**74.31**
	PSC								
		190100	PSC 110	0.800	501.00	626.25	459.00	573.75	91.62
		190100	PSC 111	0.300	192.00	640.00	102.00	340.00	53.13
			PSC Total	**1.100**	**693.00**	**630.00**	**561.00**	**510.00**	**80.95**
	SCI								
		490100	SCI 110	1.400	861.00	615.00	714.00	510.00	82.93
			SCI Total	**1.400**	**861.00**	**615.00**	**714.00**	**510.00**	**82.93**
		******** Division Totals**		**111.190**	**76,045.50**	**683.92**	**61,858.50**	**556.33**	**81.34**

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DIVISION -- MATHEMATICS, NATURAL SCIENCES & PE *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
ES 030	083500	.111	40.00	360.36	28.00	252.25	70.00
ES 037	083500	.111	60.00	540.54	36.00	324.32	60.00
ES 039	083500	.111	60.00	540.54	38.00	342.34	63.33
ES 041	083500	.167	75.00	449.10	63.00	377.24	84.00
ES 043A	083500	.222	160.00	720.72	90.00	405.40	56.25
ES 043B	083500	.111	80.00	720.72	58.00	522.52	72.50
ES 044	083500	.333	180.00	540.54	136.00	408.40	75.55
ES 060A	083500	.111	160.00	1441.44	144.00	1297.29	90.00
ES 076A	083500	.777	504.00	648.64	338.00	435.00	67.06
ES 120A	083500	.555	416.00	749.54	310.00	558.55	74.51
ES 121	083500	.111	50.00	450.45	36.00	324.32	72.00
ES 125A	083500	.333	240.00	720.72	112.00	336.33	46.66
ES 125B	083500	.167	120.00	718.56	48.00	287.42	40.00
ES 130C	083500	.167	120.00	718.56	82.00	491.01	68.33
ES 155A	083500	.333	240.00	720.72	110.00	330.33	45.83
ES 155B	083500	.222	160.00	720.72	124.00	558.55	77.50
ES 170A	083500	.333	240.00	720.72	236.00	708.70	98.33
ES 171A	083500	.111	72.00	648.64	40.00	360.36	55.55
ES 172A	083500	.111	60.00	540.54	36.00	324.32	60.00
ES 175A	083500	.333	216.00	648.64	144.00	432.43	66.66
ES 175B	083500	.111	72.00	648.64	36.00	324.32	50.00
ES 180	083500	.222	180.00	810.81	160.00	720.72	88.88
ES 185A	083500	.167	120.00	718.56	126.00	754.49	105.00
ES 200	083500	.668	390.00	583.83	234.00	350.29	60.00
ES 203	083550	.555	300.00	540.54	380.00	684.68	126.66
ES 208	083500	.111	70.00	630.63	26.00	234.23	37.14
ES 210	083500	.555	250.00	450.45	170.00	306.30	68.00
ES 215	083550	.555	250.00	450.45	160.00	288.28	64.00
ES 219	083500	.111	60.00	540.54	30.00	270.27	50.00
ES 221	083550	1.110	500.00	450.45	550.00	495.49	110.00
ES 224	083550	1.110	500.00	450.45	280.00	252.25	56.00
ES 230	083550	.555	250.00	450.45	130.00	234.23	52.00
ES 234	083500	.111	50.00	450.45	46.00	414.41	92.00
ES 240	083500				10.00	10.00	1000.00
ES 250	083500	.133	120.00	902.25	126.00	947.36	105.00
ES 253	083500	.484	376.00	776.85	204.00	421.48	54.25
ES 255	083500	.300	200.00	666.66	192.00	640.00	96.00
ES 290	083500	.167	60.00	359.28	15.00	89.82	25.00
******* ES		18.855	12142.00	643.96	8841.00	468.89	72.81
GEOG104	220600	.283	185.00	653.71	40.00	141.34	21.62
GEOG106	220600	.200	150.00	750.00	156.00	780.00	104.00
GEOG120	220600	1.800	1350.00	750.00	1071.00	595.00	79.33
GEOG121	220600	.600	360.00	600.00	288.00	480.00	80.00
GEOG130	220600	.800	483.00	603.75	279.00	348.75	57.76
GEOG140	220600	.200	150.00	750.00	48.00	240.00	32.00
GEOG170	220600	.200	111.00	555.00	75.00	375.00	67.56
******* GEOG		4.083	2789.00	683.07	1957.00	479.30	70.16
GEOL104	191400	.200	150.00	750.00	138.00	690.00	92.00

REPORT INCLUDES: GROSSMONT AND IVC COMBINED *** ALL SHORT TERM CLASSES

DIVISION -- MATHEMATICS, NATURAL SCIENCES & PE *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
GEOL110	191400	1.200	705.00	587.50	558.00	465.00	79.14
GEOL111	191400	.300	192.00	640.00	129.00	430.00	67.18
GEOL121	191400	.350	192.00	548.57	36.00	102.85	18.75
******* GEOL		2.050	1239.00	604.39	861.00	420.00	69.49
HED 120	083700	2.000	2115.00	1057.50	1263.00	631.50	59.71
HED 155	083700	2.000	1500.00	750.00	984.00	492.00	65.60
HED 158	083700	.200	222.00	1110.00	201.00	1005.00	90.54
HED 201	083700	.200	150.00	750.00	96.00	480.00	64.00
******* HED		4.400	3987.00	906.13	2544.00	578.18	63.80
MATH088	170100	1.335	800.00	599.25	676.00	506.36	84.50
MATH089	170100	.333	175.00	525.52	95.00	285.28	54.28
MATH090	170100	6.660	4670.00	701.20	3682.00	552.85	78.84
MATH097	170100	.400	270.00	675.00	108.00	270.00	40.00
MATH103	170100	4.600	3105.00	675.00	2277.00	495.00	73.33
MATH110	170100	5.994	4515.00	753.25	3546.00	591.59	78.53
MATH120	170100	2.200	1485.00	675.00	933.00	424.09	62.82
MATH125	170100	.500	320.00	640.00	236.00	472.00	73.75
MATH126	170100	.750	540.00	720.00	140.00	186.66	25.92
MATH150	170100	.200	96.00	480.00	30.00	150.00	31.25
MATH160	170100	4.600	3105.00	675.00	2649.00	575.86	85.31
MATH170	170100	.600	405.00	675.00	348.00	580.00	85.92
MATH175	170100	2.136	1400.00	655.43	824.00	385.76	58.85
MATH176	170100	1.600	1080.00	675.00	852.00	532.50	78.88
MATH178	170100	2.403	1620.00	674.15	976.00	406.15	60.24
MATH180	170100	2.331	1575.00	675.67	1240.00	531.96	78.73
MATH245	170100	.200	90.00	450.00	36.00	180.00	40.00
MATH280	170100	1.335	900.00	674.15	656.00	491.38	72.88
MATH281	170100	.534	360.00	674.15	232.00	434.45	64.44
MATH284	170100	.200	90.00	450.00	93.00	465.00	103.33
MATH285	170100	.200	105.00	525.00	87.00	435.00	82.85
******* MATH		39.111	26706.00	682.82	19716.00	504.10	73.82
OCEA112	191900	1.200	666.00	555.00	447.00	372.50	67.11
OCEA113	191900	.150	96.00	640.00	81.00	540.00	84.37
******* OCEA		1.350	762.00	564.44	528.00	391.11	69.29
PHYC110	190200	1.050	576.00	548.57	444.00	422.85	77.08
PHYC130	190200	.350	192.00	548.57	174.00	497.14	90.62
PHYC131	190200	.350	192.00	548.57	138.00	394.28	71.87
PHYC140	190200	.700	384.00	548.57	372.00	531.42	96.87
PHYC240	190200	.350	192.00	548.57	156.00	445.71	81.25
PHYC241	190200	.350	192.00	548.57	84.00	240.00	43.75
******* PHYC		3.150	1728.00	548.57	1368.00	434.28	79.16
PSC 110	190100	.600	405.00	675.00	348.00	580.00	85.92
PSC 111	190100	.300	192.00	640.00	162.00	540.00	84.37
******* PSC		.900	597.00	663.33	510.00	566.66	85.42

DIVISION -- MATHEMATICS, NATURAL SCIENCES & PE *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
ES 037	083500	.111	60.00	540.54	38.00	342.34	63.33
ES 039	083500	.111	40.00	360.36	38.00	342.34	95.00
ES 040	083500	.222	120.00	540.54	92.00	414.41	76.66
ES 041	083500	.167	75.00	449.10	75.00	449.10	100.00
ES 043A	083500	.333	240.00	720.72	130.00	390.39	54.16
ES 043B	083500	.111	80.00	720.72	40.00	360.36	50.00
ES 044	083500	.222	160.00	720.72	94.00	423.42	58.75
ES 060A	083500	.333	240.00	720.72	158.00	474.47	65.83
ES 076A	083500	.888	576.00	648.64	340.00	382.88	59.02
ES 120A	083500	.555	388.00	699.09	352.00	634.23	90.72
ES 121	083500	.111	50.00	450.45	32.00	288.28	64.00
ES 125A	083500	.222	160.00	720.72	88.00	396.39	55.00
ES 125B	083500	.167	120.00	718.56	30.00	179.64	25.00
ES 130C	083500	.167	120.00	718.56	75.00	449.10	62.50
ES 155A	083500	.222	160.00	720.72	126.00	567.56	78.75
ES 155B	083500	.222	160.00	720.72	104.00	468.46	65.00
ES 170A	083500	.333	240.00	720.72	218.00	654.65	90.83
ES 171A	083500	.111	80.00	720.72	36.00	324.32	45.00
ES 172A	083500	.111	70.00	630.63	68.00	612.61	97.14
ES 175A	083500	.444	320.00	720.72	136.00	306.30	42.50
ES 175B	083500	.111	80.00	720.72	32.00	288.28	40.00
ES 180	083500	.222	180.00	810.81	104.00	468.46	57.77
ES 185A	083500	.167	120.00	718.56	114.00	682.63	95.00
ES 199	083500		3.00	3.00	3.00	3.00	100.00
ES 200	083500	.334	240.00	718.56	192.00	574.85	80.00
ES 204	083500	.333	260.00	780.78	156.00	468.46	60.00
ES 206	083550	1.110	600.00	540.54	380.00	342.34	63.33
ES 209	083500	.555	250.00	450.45	230.00	414.41	92.00
ES 211	083500	.111	40.00	360.36	24.00	216.21	60.00
ES 212	083550	1.110	1700.00	1531.53	1260.00	1135.13	74.11
ES 216	083500	.111	50.00	450.45	42.00	378.37	84.00
ES 218	083550	.555	300.00	540.54	220.00	396.39	73.33
ES 225	083500	.222	100.00	450.45	54.00	243.24	54.00
ES 230	083550	.555	200.00	360.36	140.00	252.25	70.00
ES 231	083500	.111	50.00	450.45	22.00	198.19	44.00
ES 233	083550	1.110	500.00	450.45	490.00	441.44	98.00
ES 240	083500				10.00	10.00	1000.00
ES 250	083500	.133	140.00	1052.63	130.00	977.44	92.85
ES 253	083500	.484	380.00	785.12	152.00	314.04	40.00
ES 255	083500	.300	200.00	666.66	156.00	520.00	78.00
ES 262	083500	.111	150.00	1351.35	106.00	954.95	70.66
ES 263	083500	.111	150.00	1351.35	84.00	756.75	56.00
ES 290	083500	.167	108.00	646.70	15.00	89.82	13.88
******* ES		20.519	14365.00	700.08	9881.00	481.55	68.78
GEOG106	220600	.200	150.00	750.00	147.00	735.00	98.00
GEOG120	220600	1.600	1200.00	750.00	966.00	603.75	80.50
GEOG121	220600	.650	360.00	553.84	213.00	327.69	59.16
GEOG130	220600	.800	483.00	603.75	279.00	348.75	57.76
GEOG140	220600	.200	111.00	555.00	39.00	195.00	35.13

DIVISION -- MATHEMATICS, NATURAL SCIENCES & PE *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
GEOG170	220600	.200	111.00	555.00	84.00	420.00	75.67
******* GEOG		3.650	2415.00	661.64	1728.00	473.42	71.55
GEOL104	191400	.200	150.00	750.00	123.00	615.00	82.00
GEOL110	191400	1.200	699.00	582.50	558.00	465.00	79.82
GEOL111	191400	.300	192.00	640.00	123.00	410.00	64.06
GEOL164	191400	.067	20.00	298.50	14.00	208.95	70.00
GEOL230	191400	.200	111.00	555.00	21.00	105.00	18.91
******* GEOL		1.967	1172.00	595.83	839.00	426.53	71.58
HED 105	083700	.067	50.00	746.26	11.00	164.17	22.00
HED 120	083700	2.000	2055.00	1027.50	1494.00	747.00	72.70
HED 155	083700	2.000	1410.00	705.00	1089.00	544.50	77.23
HED 158	083700	.200	222.00	1110.00	195.00	975.00	87.83
******* HED		4.267	3737.00	875.79	2789.00	653.62	74.63
MATH088	170100	1.869	1120.00	599.25	792.00	423.75	70.71
MATH089	170100	.333	175.00	525.52	90.00	270.27	51.42
MATH090	170100	6.993	4896.00	700.12	4241.00	606.46	86.62
MATH097	170100	.400	270.00	675.00	111.00	277.50	41.11
MATH103	170100	4.400	3045.00	692.04	2730.00	620.45	89.65
MATH110	170100	6.327	4545.00	718.34	4072.00	643.59	89.59
MATH120	170100	2.000	1326.00	663.00	846.00	423.00	63.80
MATH125	170100	.750	540.00	720.00	288.00	384.00	53.33
MATH126	170100	.500	360.00	720.00	88.00	176.00	24.44
MATH150	170100	.200	96.00	480.00	57.00	285.00	59.37
MATH160	170100	4.200	2835.00	675.00	2442.00	581.42	86.13
MATH170	170100	.800	513.00	641.25	345.00	431.25	67.25
MATH175	170100	2.136	1420.00	664.79	948.00	443.82	66.76
MATH176	170100	1.600	1080.00	675.00	1038.00	648.75	96.11
MATH178	170100	2.136	1440.00	674.15	1116.00	522.47	77.50
MATH180	170100	2.331	1575.00	675.67	1310.00	561.99	83.17
MATH245	170100	.200	90.00	450.00	51.00	255.00	56.66
MATH280	170100	1.335	900.00	674.15	568.00	425.46	63.11
MATH281	170100	.534	360.00	674.15	264.00	494.38	73.33
MATH284	170100	.200	135.00	675.00	90.00	450.00	66.66
MATH285	170100	.200	135.00	675.00	123.00	615.00	91.11
******* MATH		39.444	26856.00	680.86	21610.00	547.86	80.46
OCEA112	191900	1.200	666.00	555.00	579.00	482.50	86.93
OCEA113	191900	.150	96.00	640.00	84.00	560.00	87.50
******* OCEA		1.350	762.00	564.44	663.00	491.11	87.00
PHYC110	190200	.900	576.00	640.00	396.00	440.00	68.75
PHYC130	190200	.350	192.00	548.57	240.00	685.71	125.00
PHYC140	190200	1.050	576.00	548.57	516.00	491.42	89.58
PHYC240	190200	.350	192.00	548.57	150.00	428.57	78.12
******* PHYC		2.650	1536.00	579.62	1302.00	491.32	84.76
PSC 110	190100	.800	540.00	675.00	417.00	521.25	77.22

DIVISION -- MATHEMATICS, NATURAL SCIENCES & PE *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
ES 037	083500	.111	60.00	540.54	20.00	180.18	33.33
ES 039	083500	.111	60.00	540.54	36.00	324.32	60.00
ES 043A	083500	.222	160.00	720.72	74.00	333.33	46.25
ES 043B	083500	.111	80.00	720.72	46.00	414.41	57.50
ES 044	083500	.444	240.00	540.54	136.00	306.30	56.66
ES 060A	083500	.222	160.00	720.72	142.00	639.63	88.75
ES 076A	083500	.666	432.00	648.64	294.00	441.44	68.05
ES 120A	083500	.555	500.00	900.90	342.00	616.21	68.40
ES 121	083500	.111	50.00	450.45	34.00	306.30	68.00
ES 125A	083500	.444	320.00	720.72	148.00	333.33	46.25
ES 125B	083500	.167	120.00	718.56	48.00	287.42	40.00
ES 130C	083500	.167	120.00	718.56	110.00	658.68	91.66
ES 155A	083500	.333	240.00	720.72	162.00	486.48	67.50
ES 155B	083500	.222	160.00	720.72	114.00	513.51	71.25
ES 170A	083500	.333	240.00	720.72	222.00	666.66	92.50
ES 171A	083500	.111	72.00	648.64	38.00	342.34	52.77
ES 172A	083500	.111	60.00	540.54	20.00	180.18	33.33
ES 175A	083500	.222	144.00	648.64	124.00	558.55	86.11
ES 175B	083500	.111	72.00	648.64	60.00	540.54	83.33
ES 180	083500	.222	180.00	810.81	140.00	630.63	77.77
ES 185A	083500	.167	120.00	718.56	144.00	862.27	120.00
ES 200	083500	.501	360.00	718.56	291.00	580.83	80.83
ES 203	083550	.555	300.00	540.54	400.00	720.72	133.33
ES 208	083500	.111	70.00	630.63	28.00	252.25	40.00
ES 210	083500	.555	250.00	450.45	160.00	288.28	64.00
ES 215	083550	.555	250.00	450.45	150.00	270.27	60.00
ES 219	083500	.111	60.00	540.54	40.00	360.36	66.66
ES 221	083550	1.110	500.00	450.45	530.00	477.47	106.00
ES 224	083550	1.110	500.00	450.45	230.00	207.20	46.00
ES 230	083550	.555	250.00	450.45	130.00	234.23	52.00
ES 234	083500	.111	50.00	450.45	52.00	468.46	104.00
ES 250	083500	.133	70.00	526.31	74.00	556.39	105.71
ES 253	083500	.484	376.00	776.85	220.00	454.54	58.51
ES 255	083500	.300	200.00	666.66	204.00	680.00	102.00
ES 290	083500	.167	60.00	359.28	24.00	143.71	40.00
ES 299	083500	.278	125.00	449.64	96.00	345.32	76.80
******* ES		18.633	11713.00	628.61	8489.00	455.58	72.47
GEOG106	220600	.200	150.00	750.00	156.00	780.00	104.00
GEOG120	220600	1.600	1161.00	725.62	906.00	566.25	78.03
GEOG121	220600	.600	360.00	600.00	261.00	435.00	72.50
GEOG130	220600	.800	483.00	603.75	279.00	348.75	57.76
GEOG140	220600	.200	150.00	750.00	42.00	210.00	28.00
GEOG170	220600	.200	111.00	555.00	75.00	375.00	67.56
GEOG180	220600	.200	111.00	555.00	36.00	180.00	32.43
******* GEOG		3.800	2526.00	664.73	1755.00	461.84	69.47
GEOL104	191400	.200	117.00	585.00	132.00	660.00	112.82
GEOL110	191400	1.000	549.00	549.00	366.00	366.00	66.66
GEOL111	191400	.300	192.00	640.00	114.00	380.00	59.37

REPORT INCLUDES: GROSSMONT AND IVC COMBINED *** ALL SHORT TERM CLASSES

DIVISION -- MATHEMATICS, NATURAL SCIENCES & PE *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
******* GEOL		1.500	858.00	572.00	612.00	408.00	71.32
HED 120	083700	2.000	2130.00	1065.00	1518.00	759.00	71.26
HED 122	083700	.200	105.00	525.00	36.00	180.00	34.28
HED 155	083700	1.600	1245.00	778.12	804.00	502.50	64.57
HED 158	083700	.200	222.00	1110.00	213.00	1065.00	95.94
******* HED		4.000	3702.00	925.50	2571.00	642.75	69.44
MATH088	170100	1.602	960.00	599.25	748.00	466.91	77.91
MATH089	170100	.333	175.00	525.52	80.00	240.24	45.71
MATH090	170100	6.660	4670.00	701.20	3500.00	525.52	74.94
MATH097	170100	.400	270.00	675.00	81.00	202.50	30.00
MATH103	170100	4.400	2970.00	675.00	2082.00	473.18	70.10
MATH110	170100	5.994	4560.00	760.76	3149.00	525.35	69.05
MATH120	170100	2.000	1350.00	675.00	834.00	417.00	61.77
MATH125	170100	.500	320.00	640.00	192.00	384.00	60.00
MATH126	170100	.500	360.00	720.00	124.00	248.00	34.44
MATH150	170100	.200	96.00	480.00	42.00	210.00	43.75
MATH160	170100	4.200	2835.00	675.00	2265.00	539.28	79.89
MATH170	170100	.600	405.00	675.00	354.00	590.00	87.40
MATH175	170100	2.136	1400.00	655.43	916.00	428.83	65.42
MATH176	170100	1.600	1080.00	675.00	744.00	465.00	68.88
MATH178	170100	1.869	1260.00	674.15	992.00	530.76	78.73
MATH180	170100	2.331	1575.00	675.67	1115.00	478.33	70.79
MATH245	170100	.200	90.00	450.00	75.00	375.00	83.33
MATH280	170100	1.335	900.00	674.15	616.00	461.42	68.44
MATH281	170100	.534	360.00	674.15	308.00	576.77	85.55
MATH284	170100	.200	90.00	450.00	99.00	495.00	110.00
MATH285	170100	.200	105.00	525.00	93.00	465.00	88.57
******* MATH		37.794	25831.00	683.46	18409.00	487.08	71.26
OCEA112	191900	1.200	666.00	555.00	522.00	435.00	78.37
OCEA113	191900	.300	192.00	640.00	183.00	610.00	95.31
OCEA199	191900		3.00	3.00	3.00	3.00	100.00
******* OCEA		1.500	861.00	574.00	708.00	472.00	82.22
PHYC110	190200	1.050	576.00	548.57	456.00	434.28	79.16
PHYC130	190200	.350	192.00	548.57	246.00	702.85	128.12
PHYC131	190200	.350	192.00	548.57	114.00	325.71	59.37
PHYC140	190200	.700	384.00	548.57	324.00	462.85	84.37
PHYC240	190200	.350	192.00	548.57	144.00	411.42	75.00
PHYC241	190200	.350	192.00	548.57	66.00	188.57	34.37
******* PHYC		3.150	1728.00	548.57	1350.00	428.57	78.12
PSC 110	190100	.800	540.00	675.00	321.00	401.25	59.44
PSC 111	190100	.150	96.00	640.00	78.00	520.00	81.25
******* PSC		.950	636.00	669.47	399.00	420.00	62.73
SCI 110	490100	1.200	744.00	620.00	534.00	445.00	71.77
******* SCI		1.200	744.00	620.00	534.00	445.00	71.77

DIVISION -- MATHEMATICS, NATURAL SCIENCES & PE *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
ES 039	083500	.111	40.00	360.36	36.00	324.32	90.00
ES 040	083500	.222	120.00	540.54	102.00	459.45	85.00
ES 043A	083500	.333	240.00	720.72	132.00	396.39	55.00
ES 043B	083500	.111	80.00	720.72	36.00	324.32	45.00
ES 044	083500	.222	160.00	720.72	90.00	405.40	56.25
ES 060A	083500	.333	240.00	720.72	180.00	540.54	75.00
ES 076A	083500	.888	576.00	648.64	346.00	389.63	60.06
ES 120A	083500	.555	388.00	699.09	268.00	482.88	69.07
ES 121	083500	.111	50.00	450.45	28.00	252.25	56.00
ES 125A	083500	.222	160.00	720.72	100.00	450.45	62.50
ES 125B	083500	.167	120.00	718.56	63.00	377.24	52.50
ES 130C	083500	.167	120.00	718.56	95.00	568.86	79.16
ES 155A	083500	.222	160.00	720.72	110.00	495.49	68.75
ES 155B	083500	.222	160.00	720.72	84.00	378.37	52.50
ES 170A	083500	.333	240.00	720.72	208.00	624.62	86.66
ES 171A	083500	.111	80.00	720.72	44.00	396.39	55.00
ES 172A	083500	.111	70.00	630.63	46.00	414.41	65.71
ES 175A	083500	.333	240.00	720.72	138.00	414.41	57.50
ES 175B	083500	.111	80.00	720.72	44.00	396.39	55.00
ES 180	083500	.222	180.00	810.81	120.00	540.54	66.66
ES 185A	083500	.167	120.00	718.56	102.00	610.77	85.00
ES 199	083500		6.00	6.00	6.00	6.00	100.00
ES 200	083500	.167	120.00	718.56	147.00	880.23	122.50
ES 204	083500	.333	260.00	780.78	184.00	552.55	70.76
ES 206	083550	1.110	600.00	540.54	420.00	378.37	70.00
ES 209	083500	.555	250.00	450.45	200.00	360.36	80.00
ES 211	083500	.111	40.00	360.36	36.00	324.32	90.00
ES 212	083550	1.110	1700.00	1531.53	1200.00	1081.08	70.58
ES 216	083500	.111	50.00	450.45	46.00	414.41	92.00
ES 218	083550	.555	300.00	540.54	200.00	360.36	66.66
ES 225	083500	.222	100.00	450.45	48.00	216.21	48.00
ES 230	083550	.555	200.00	360.36	100.00	180.18	50.00
ES 231	083500	.111	50.00	450.45	30.00	270.27	60.00
ES 233	083550	1.110	500.00	450.45	410.00	369.36	82.00
ES 250	083500	.133	100.00	751.87	98.00	736.84	98.00
ES 253	083500	.484	380.00	785.12	220.00	454.54	57.89
ES 255	083500	.300	200.00	666.66	180.00	600.00	90.00
ES 262	083500	.111	150.00	1351.35	120.00	1081.08	80.00
ES 263	083500	.111	150.00	1351.35	96.00	864.86	64.00
ES 290	083500	.167	108.00	646.70	12.00	71.85	11.11
ES 299	083500	.222	100.00	450.45	82.00	369.36	82.00
******* ES		20.185	14123.00	699.67	9828.00	486.89	69.58
GEOG106	220600	.200	111.00	555.00	108.00	540.00	97.29
GEOG120	220600	2.000	1500.00	750.00	1044.00	522.00	69.60
GEOG121	220600	.450	270.00	600.00	204.00	453.33	75.55
GEOG130	220600	1.000	582.00	582.00	294.00	294.00	50.51
GEOG170	220600	.200	111.00	555.00	63.00	315.00	56.75
******* GEOG		3.850	2574.00	668.57	1713.00	444.93	66.55

DIVISION -- MATHEMATICS, NATURAL SCIENCES & PE *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
GEOL104	191400	.200	150.00	750.00	138.00	690.00	92.00
GEOL110	191400	1.200	666.00	555.00	435.00	362.50	65.31
GEOL111	191400	.300	192.00	640.00	132.00	440.00	68.75
GEOL210	191400	.200	111.00	555.00	54.00	270.00	48.64
******* GEOL		1.900	1119.00	588.94	759.00	399.47	67.82
HED 120	083700	2.000	2070.00	1035.00	1674.00	837.00	80.86
HED 122	083700	.200	105.00	525.00	33.00	165.00	31.42
HED 155	083700	1.400	1005.00	717.85	774.00	552.85	77.01
HED 158	083700	.200	222.00	1110.00	216.00	1080.00	97.29
******* HED		3.800	3402.00	895.26	2697.00	709.73	79.27
MATH088	170100	1.869	1120.00	599.25	780.00	417.33	69.64
MATH089	170100	.333	175.00	525.52	90.00	270.27	51.42
MATH090	170100	6.993	4896.00	700.12	4478.00	640.35	91.46
MATH097	170100	.400	270.00	675.00	138.00	345.00	51.11
MATH103	170100	4.200	2910.00	692.85	2487.00	592.14	85.46
MATH110	170100	5.994	4320.00	720.72	3691.00	615.78	85.43
MATH120	170100	2.000	1326.00	663.00	933.00	466.50	70.36
MATH125	170100	.750	540.00	720.00	216.00	288.00	40.00
MATH126	170100	.500	360.00	720.00	100.00	200.00	27.77
MATH150	170100	.200	96.00	480.00	33.00	165.00	34.37
MATH160	170100	4.200	2808.00	668.57	2358.00	561.42	83.97
MATH170	170100	.800	540.00	675.00	351.00	438.75	65.00
MATH175	170100	2.136	1420.00	664.79	1144.00	535.58	80.56
MATH176	170100	1.600	1080.00	675.00	960.00	600.00	88.88
MATH178	170100	2.136	1440.00	674.15	1008.00	471.91	70.00
MATH180	170100	2.331	1575.00	675.67	1310.00	561.99	83.17
MATH245	170100	.200	90.00	450.00	39.00	195.00	43.33
MATH280	170100	1.335	900.00	674.15	532.00	398.50	59.11
MATH281	170100	.534	360.00	674.15	240.00	449.43	66.66
MATH284	170100	.200	135.00	675.00	111.00	555.00	82.22
MATH285	170100	.200	135.00	675.00	111.00	555.00	82.22
******* MATH		38.911	26496.00	680.93	21110.00	542.52	79.67
OCEA112	191900	1.200	666.00	555.00	555.00	462.50	83.33
OCEA113	191900	.150	96.00	640.00	84.00	560.00	87.50
******* OCEA		1.350	762.00	564.44	639.00	473.33	83.85
PHYC110	190200	1.050	576.00	548.57	402.00	382.85	69.79
PHYC130	190200	.350	192.00	548.57	204.00	582.85	106.25
PHYC140	190200	1.050	576.00	548.57	354.00	337.14	61.45
PHYC199	190200		3.00	3.00			
PHYC240	190200	.350	192.00	548.57	168.00	480.00	87.50
******* PHYC		2.800	1539.00	549.64	1128.00	402.85	73.29
PSC 110	190100	.800	540.00	675.00	363.00	453.75	67.22
PSC 111	190100	.150	96.00	640.00	81.00	540.00	84.37
******* PSC		.950	636.00	669.47	444.00	467.36	69.81

APPENDIX 12 –

DEPARTMENT EQUIVALENCIES

GCCCD Equivalency Criteria

The Academic Senate for California Community Colleges has consistently supported the following basic principles for granting equivalency:

- Equivalent to the minimum qualifications means *equal to* the minimum qualifications, not nearly equal.
- The applicant must provide evidence of attaining coursework or experience equal to the general education component of a regular associate or bachelor's degree.
- The applicant must provide evidence of attaining the skills and knowledge provided by specialized course work required for a master's degree (for disciplines on the Master's List) or requisite experience or coursework (for disciplines on the Non-Master's List).

The Academic Senate believes that faculty members must exemplify to their students the value of an education that is both well-rounded and specialized.

References: Education Code §§ 87359 and 87360

Please select your college and the appropriate box (1 or 2) below.

☐ CC
☒ GC Discipline Name Geography Contact Name: Mark A. Goodman Ext. 7886

☒ 1. The discipline criteria listed below have been reviewed and agreed upon by discipline experts at both colleges.

☐ 2. We have no discipline counterpart at the other college.

List the discipline equivalency criteria below (attach an additional sheet if necessary):

Option A:

- Bachelor's degree in related discipline
  AND
- 18 semester units of graduate-level coursework in geology, earth sciences, meteorology, geography, or GIS
  AND
- One of the following:
  1. a minimum of one (1) year of direct, discipline-specific work experience
  2. a minimum of one (1) academic year of supervised discipline-specific research and written work similar to that of a master's thesis.

Option B:

- Bachelor's degree in geography
  AND
- Master's degree (unspecified) with thesis requirement
  AND
- 18 semester units of graduate-level coursework in geology, earth sciences, meteorology, geography, history, or GIS

Option C:

- Bachelor's degree in geology, earth sciences, meteorology, geography, or GIS
  AND
- One of the following:
  1. a minimum of five (5) years of direct, discipline-specific work experience to include graduate-level written work
  2. a minimum of five (5) academic years of supervised discipline-specific research and written work similar to that of a master's thesis.

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GCCCD Equivalency Criteria

The Academic Senate for California Community Colleges has consistently supported the following basic principles for granting equivalency:

- Equivalent to the minimum qualifications means *equal to* the minimum qualifications, not nearly equal.
- The applicant must provide evidence of attaining coursework or experience equal to the general education component of a regular associate or bachelor's degree.
- The applicant must provide evidence of attaining the skills and knowledge provided by specialized course work required for a master's degree (for disciplines on the Master's List) or requisite experience or coursework (for disciplines on the Non-Master's List).

The Academic Senate believes that faculty members must exemplify to their students the value of an education that is both well-rounded and specialized.

References: Education Code §§ 87359 and 87360

Please select your college and the appropriate box (1 or 2) below.

☐ CC
☒ GC Discipline Name: Earth Sciences Contact Name: Chris Hill Ext. 7342

☒ 1. The discipline criteria listed below have been reviewed and agreed upon by discipline experts at both colleges.

☐ 2. We have no discipline counterpart at the other college.

List the discipline equivalency criteria below (attach an additional sheet if necessary):

Option A:

- Bachelor's degree (preferably in related discipline)
  AND
- 18 semester units of graduate-level coursework in geology, geophysics, earth sciences, meteorology, oceanography, or paleontology
  AND
- One of the following:
  1. a minimum of one (1) year of direct, discipline-specific work experience
  2. a minimum of one (1) academic year of supervised discipline-specific research and written work similar to that of a master's thesis.

Option B:

- Bachelor's degree in geology, geophysics, earth sciences, meteorology, oceanography, or paleontology
  AND
- Master's degree (unspecified) with thesis requirement
  AND
- 12 semester units of graduate-level in geology, geochemistry, geophysics, earth sciences, meteorology, oceanography, physics, physical geography, or paleontology.

Option C:

- Bachelor's degree in geology, geophysics, earth sciences, meteorology, oceanography, or paleontology
  AND
- One of the following:
  1. a minimum of five (5) years of direct, discipline-specific work experience and evidence of graduate-level written work
  2. a minimum of five (5) academic years of supervised discipline-specific research and written work similar to that of a master's thesis.

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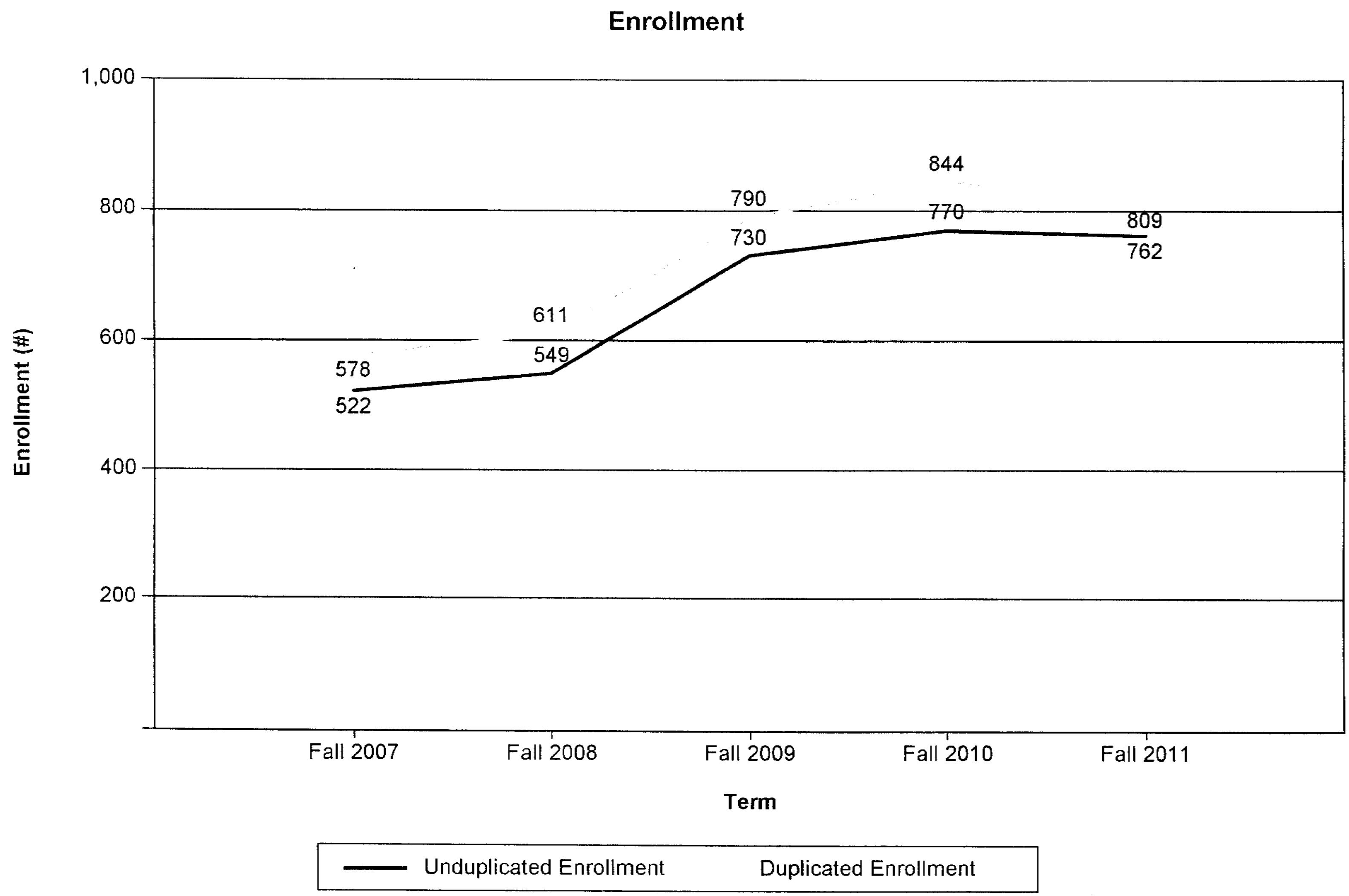
APPENDIX 13 –

STATISTICAL DATA OUTCOMES PROFILE

Grossmont College Enrollment
GEOG



200

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Gender (Duplicated Student Count)

Gender	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
Female	277	47.9 %	310	50.7 %	360	45.6 %	409	48.5 %	389	48.1 %
Male	298	51.6 %	297	48.6 %	425	53.8 %	427	50.6 %	410	50.7 %
Not Reported	3	0.5 %	4	0.7 %	5	0.6 %	8	0.9 %	10	1.2 %
Total	578	100.0 %	611	100.0 %	790	100.0 %	844	100.0 %	809	100.0 %

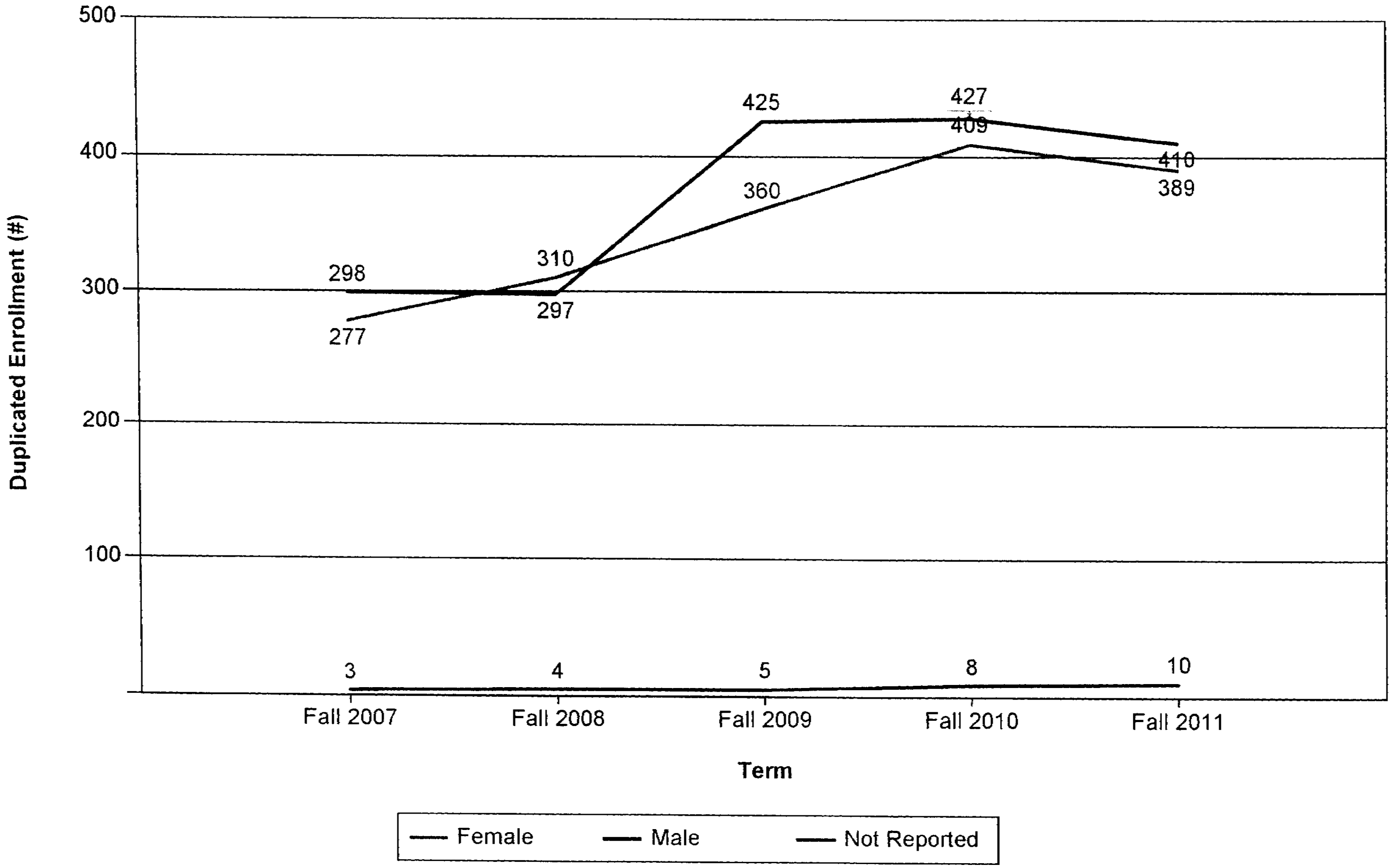
Enrollment by Gender (Unduplicated Student Count)

Gender	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
Female	246	47.1 %	277	50.5 %	340	46.6 %	373	48.4 %	367	48.2 %
Male	273	52.3 %	268	48.8 %	385	52.7 %	391	50.8 %	385	50.5 %
Not Reported	3	0.6 %	4	0.7 %	5	0.7 %	6	0.8 %	10	1.3 %
Total	522	100.0 %	549	100.0 %	730	100.0 %	770	100.0 %	762	100.0 %

201

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Gender (Duplicated Student Count)

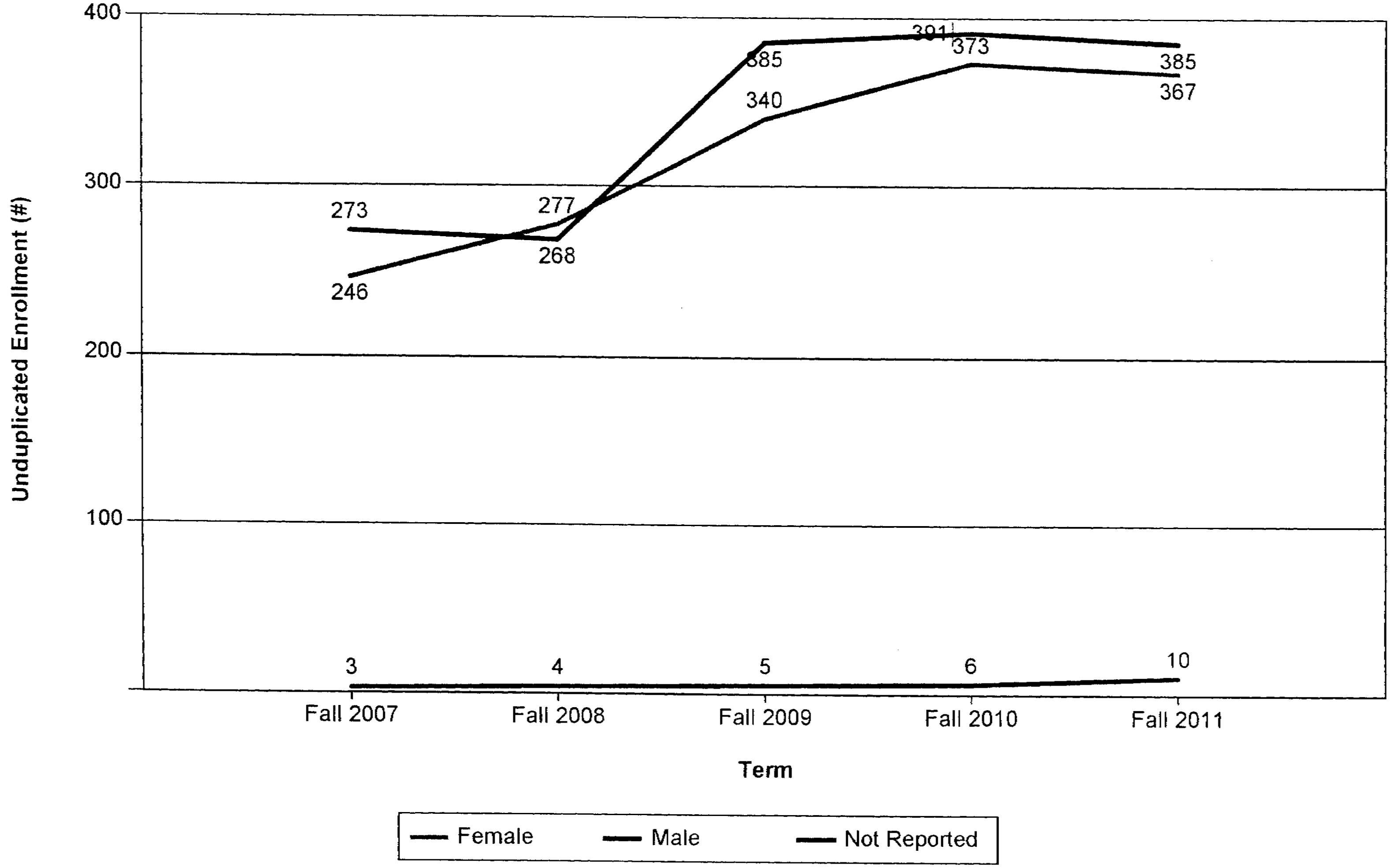


202

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student head...

Grossmont College Enrollment
GEOG

Enrollment by Gender (Unduplicated Student Count)



203

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Age (Duplicated Student Counts)

Age	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	225	38.9 %	201	32.9 %	300	38.0 %	346	41.0 %	368	45.5 %
20-24	267	46.2 %	322	52.7 %	380	48.1 %	361	42.8 %	318	39.3 %
25-29	50	8.7 %	53	8.7 %	68	8.6 %	83	9.8 %	74	9.1 %
30-49	35	6.1 %	27	4.4 %	33	4.2 %	43	5.1 %	33	4.1 %
50+	1	0.2 %	8	1.3 %	9	1.1 %	11	1.3 %	16	2.0 %
Total	578	100.0 %	611	100.0 %	790	100.0 %	844	100.0 %	809	100.0 %

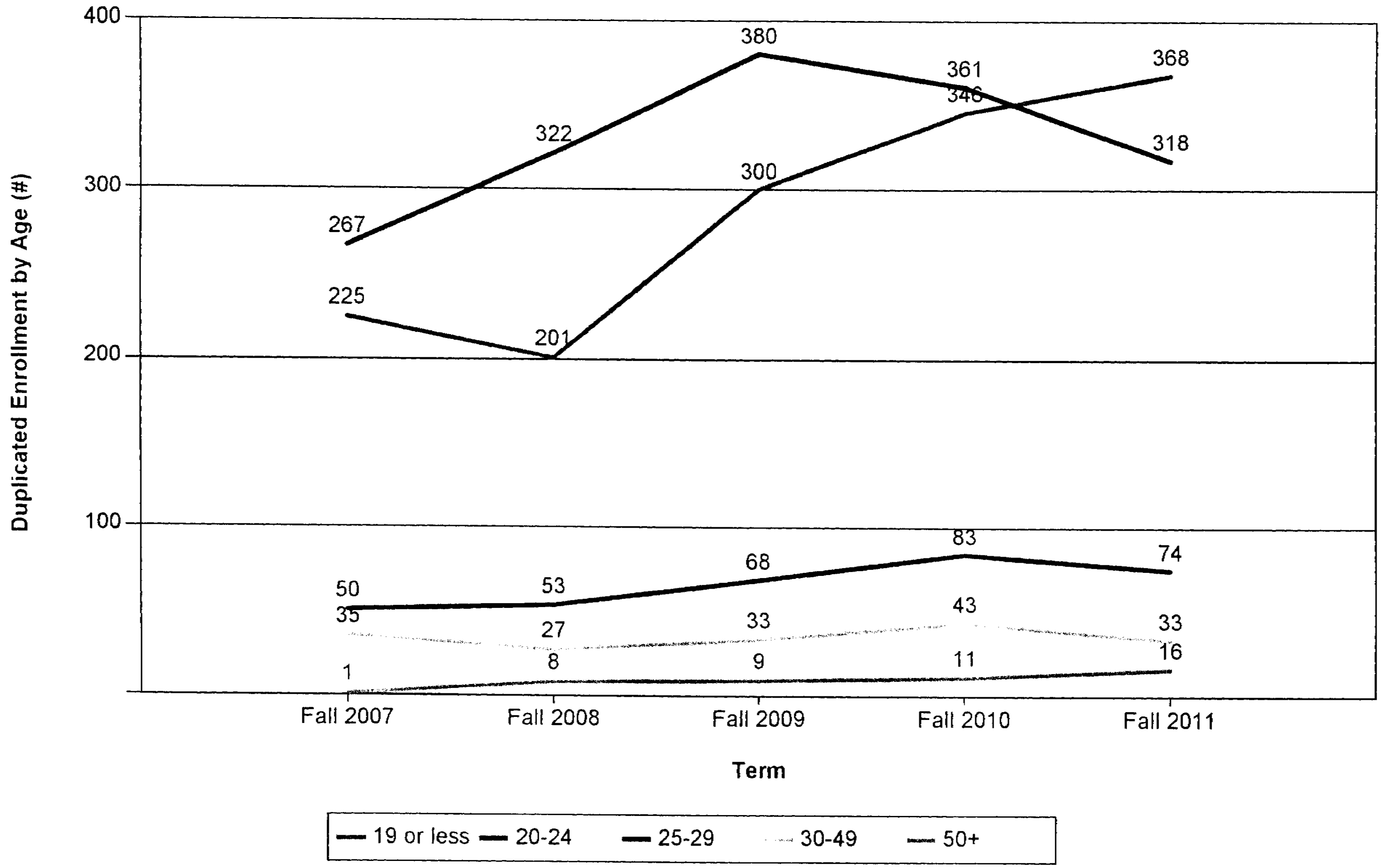
Enrollment by Age (Unduplicated Student Count)

Age	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	205	39.3 %	187	34.1 %	283	38.8 %	323	41.9 %	349	45.8 %
20-24	238	45.6 %	288	52.5 %	348	47.7 %	329	42.7 %	297	39.0 %
25-29	47	9.0 %	46	8.4 %	60	8.2 %	71	9.2 %	71	9.3 %
30-49	31	5.9 %	21	3.8 %	31	4.2 %	37	4.8 %	32	4.2 %
50+	1	0.2 %	7	1.3 %	8	1.1 %	10	1.3 %	13	1.7 %
Total	522	100.0 %	549	100.0 %	730	100.0 %	770	100.0 %	762	100.0 %

204

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

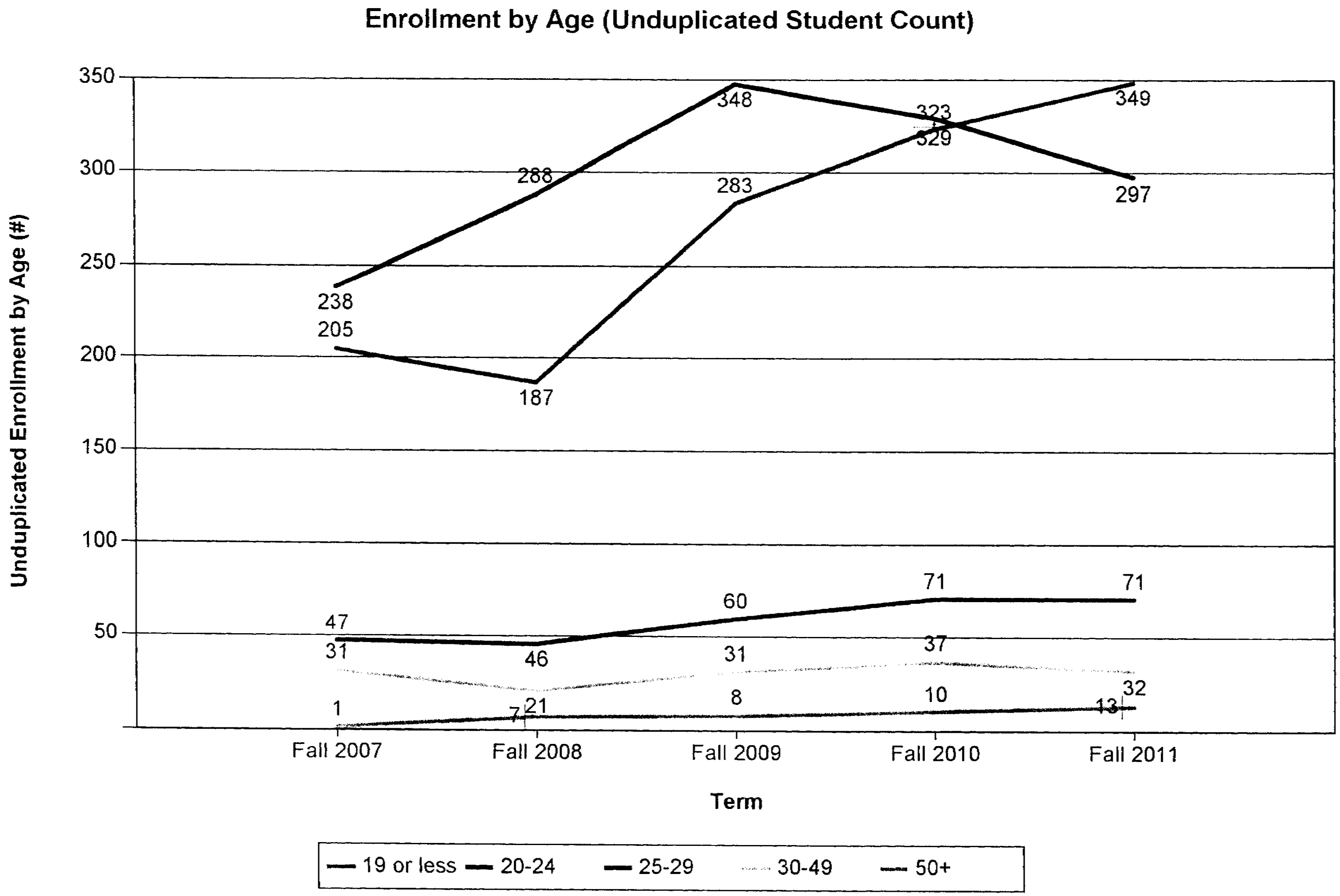
Enrollment by Age (Duplicated Student Count)



205

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG



206

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	1	0.2 %	8	1.3 %	10	1.3 %	5	0.6 %	4	0.5 %
Asian	43	7.4 %	58	9.5 %	36	4.6 %	36	4.3 %	35	4.3 %
Black non-Hispanic	38	6.6 %	45	7.4 %	37	4.7 %	56	6.6 %	49	6.1 %
Filipino	15	2.6 %	20	3.3 %	37	4.7 %	32	3.8 %	26	3.2 %
Hispanic	89	15.4 %	126	20.6 %	168	21.3 %	224	26.5 %	247	30.5 %
Not Reported	47	8.1 %	51	8.3 %	55	7.0 %	38	4.5 %	23	2.8 %
Pacific Islander	11	1.9 %	6	1.0 %	13	1.6 %	9	1.1 %	8	1.0 %
Two or More	12	2.1 %	12	2.0 %	39	4.9 %	45	5.3 %	55	6.8 %
White non-Hispanic	322	55.7 %	285	46.6 %	395	50.0 %	399	47.3 %	362	44.7 %
Total	578	100.0 %	611	100.0 %	790	100.0 %	844	100.0 %	809	100.0 %

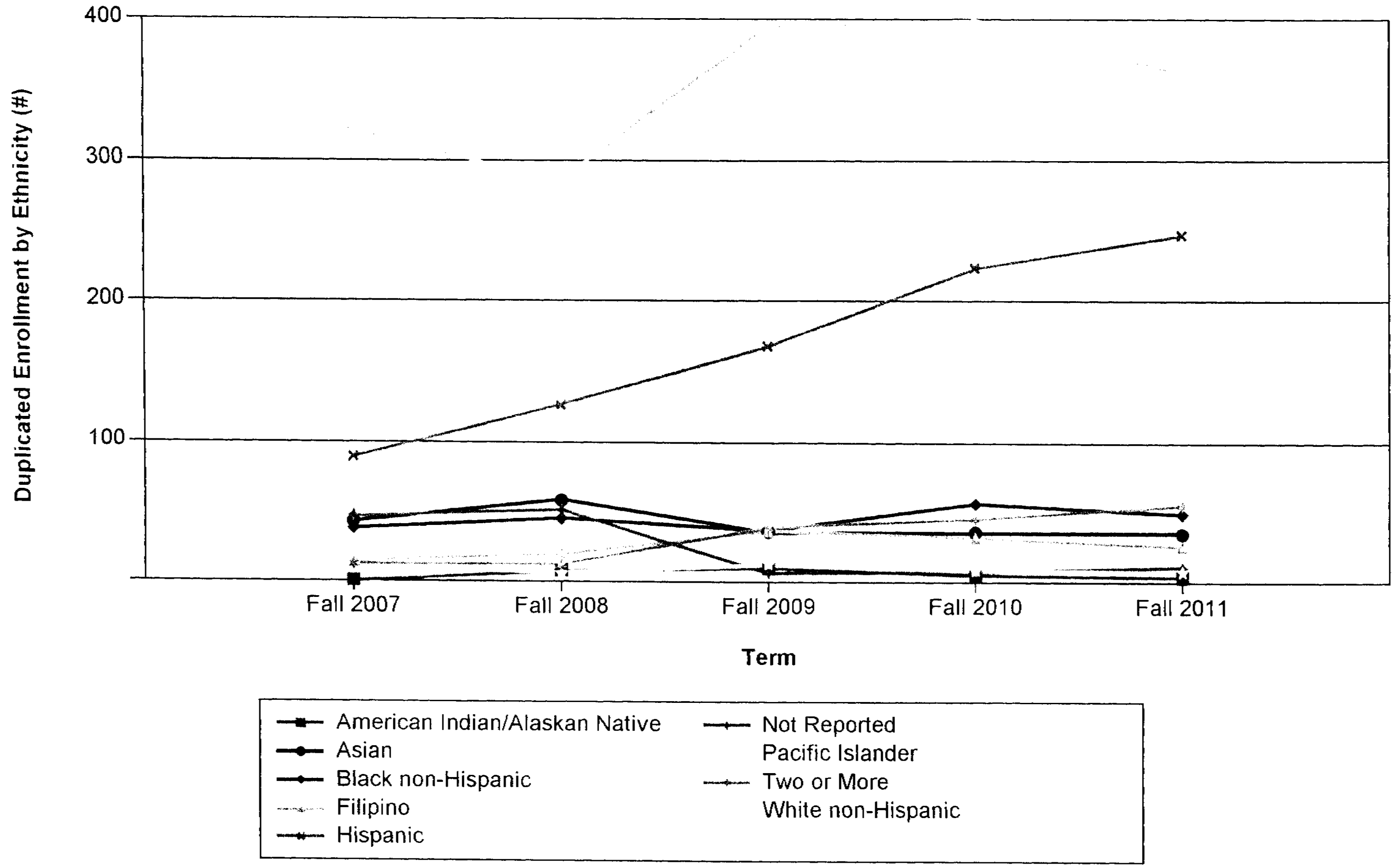
Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	1	0.2 %	6	1.1 %	9	1.2 %	5	0.6 %	4	0.5 %
Asian	35	6.7 %	46	8.4 %	33	4.5 %	33	4.3 %	34	4.5 %
Black non-Hispanic	35	6.7 %	39	7.1 %	36	4.9 %	49	6.4 %	48	6.3 %
Filipino	13	2.5 %	18	3.3 %	32	4.4 %	29	3.8 %	25	3.3 %
Hispanic	85	16.3 %	117	21.3 %	157	21.5 %	205	26.6 %	239	31.4 %
Not Reported	43	8.2 %	48	8.7 %	51	7.0 %	37	4.8 %	20	2.6 %
Pacific Islander	10	1.9 %	6	1.1 %	12	1.6 %	9	1.2 %	8	1.0 %
Two or More	10	1.9 %	12	2.2 %	34	4.7 %	44	5.7 %	52	6.8 %
White non-Hispanic	290	55.6 %	257	46.8 %	366	50.1 %	359	46.6 %	332	43.6 %
Total	522	100.0 %	549	100.0 %	730	100.0 %	770	100.0 %	762	100.0 %

207

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Ethnicity (Duplicated Student Count)

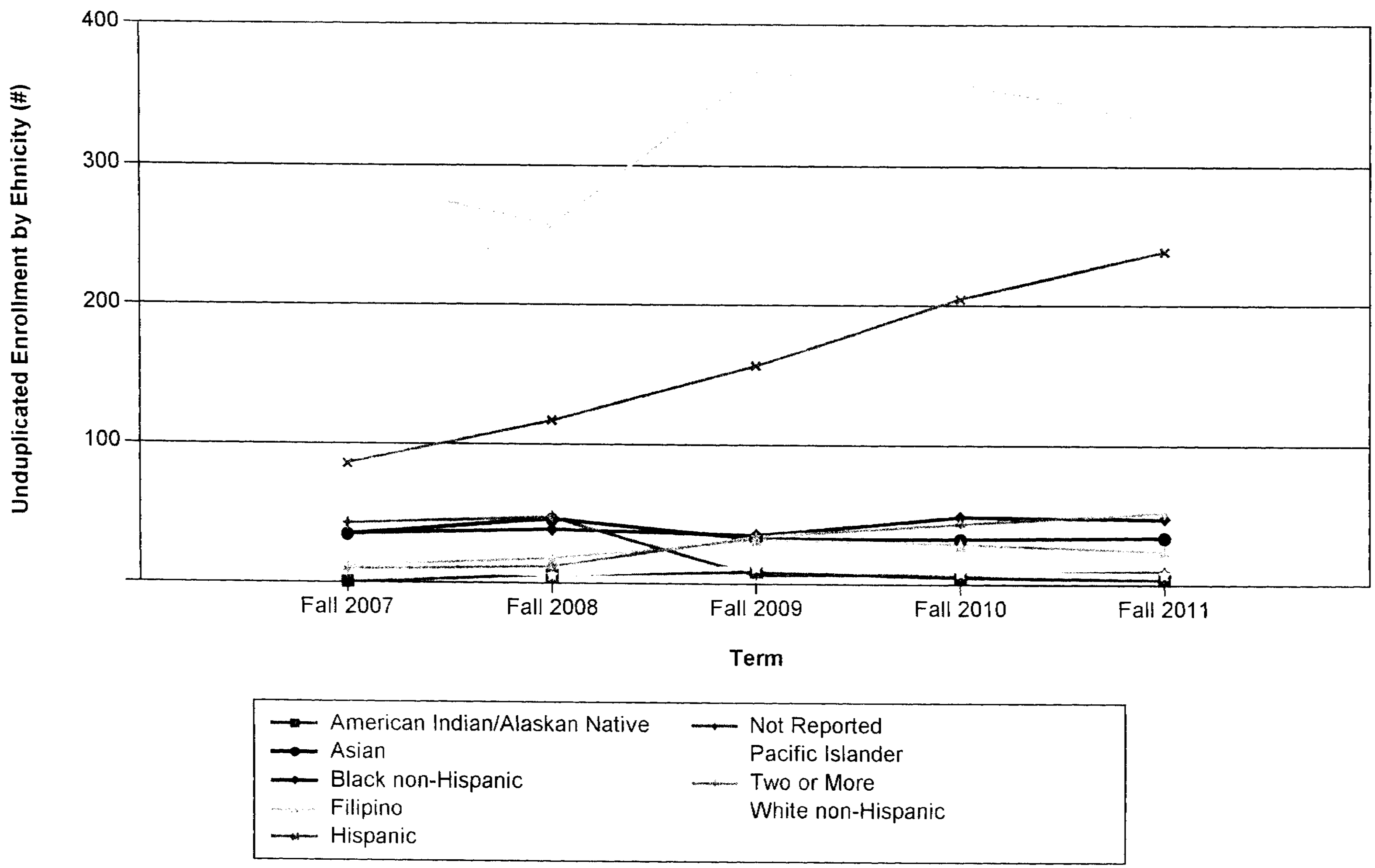


208

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

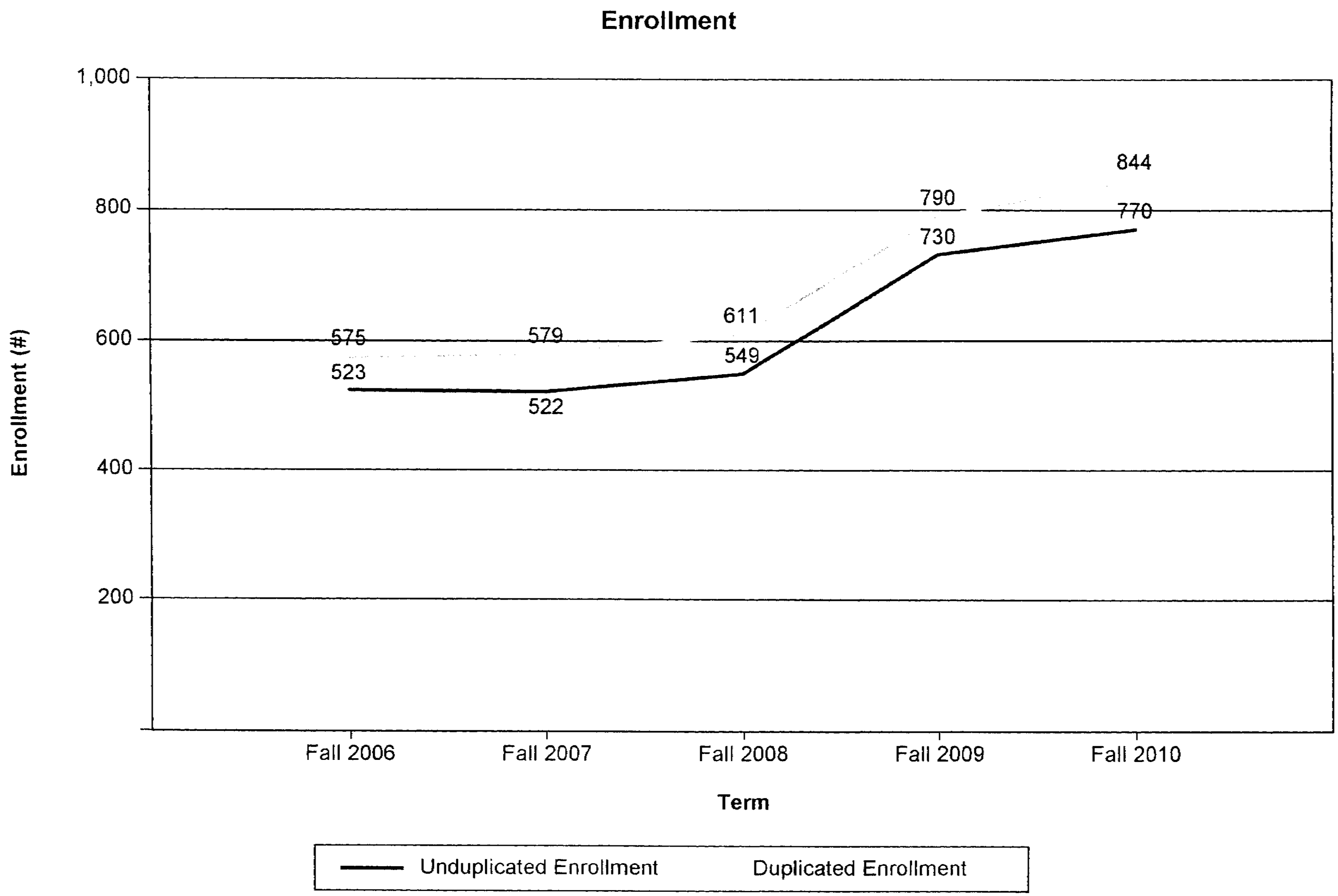
Enrollment by Ethnicity (Unduplicated Student Count)



209

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG



210

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Gender (Duplicated Student Count)

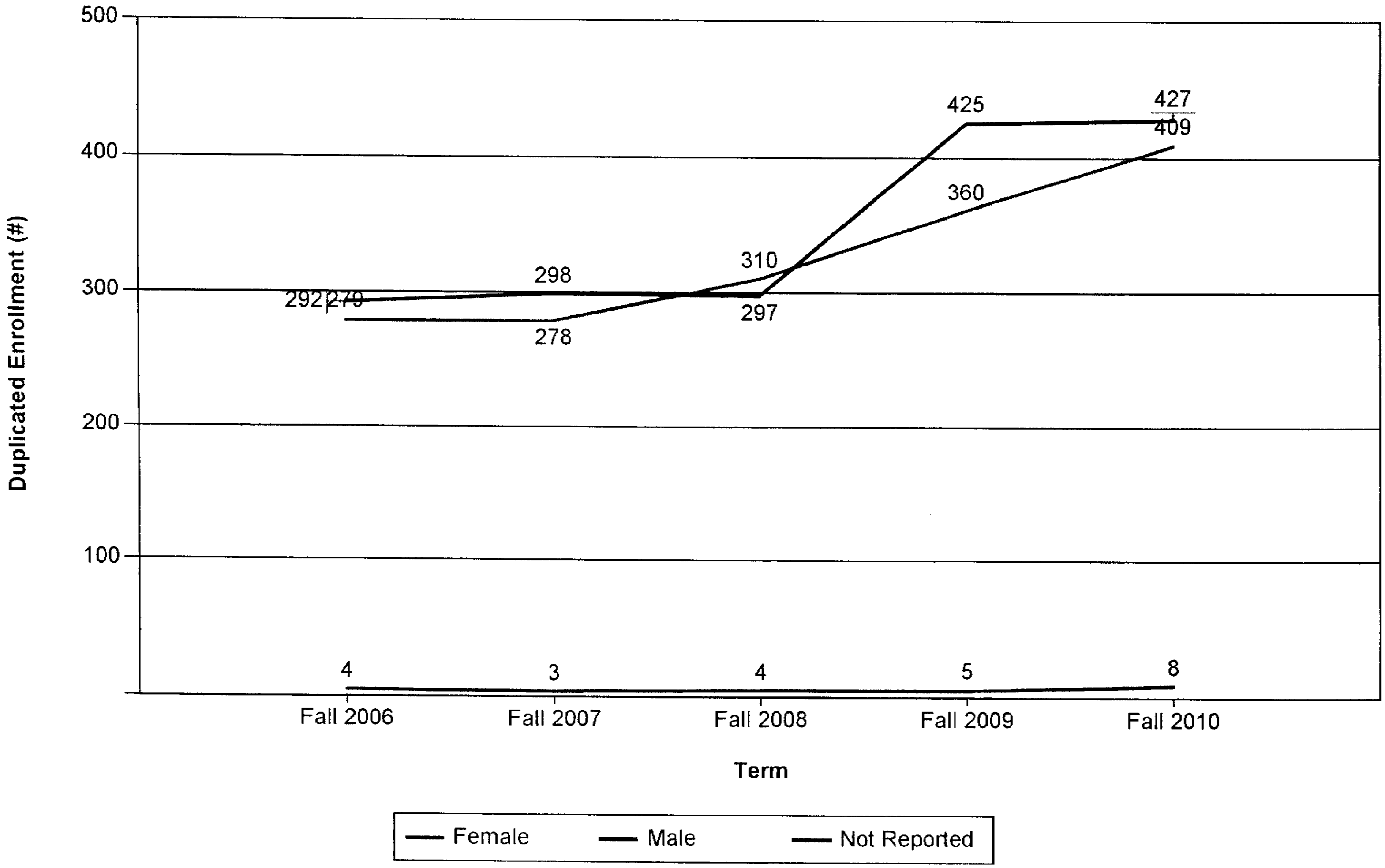
Gender	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
Female	279	48.5 %	278	48.0 %	310	50.7 %	360	45.6 %	409	48.5 %
Male	292	50.8 %	298	51.5 %	297	48.6 %	425	53.8 %	427	50.6 %
Not Reported	4	0.7 %	3	0.5 %	4	0.7 %	5	0.6 %	8	0.9 %
Total	575	100.0 %	579	100.0 %	611	100.0 %	790	100.0 %	844	100.0 %

Enrollment by Gender (Unduplicated Student Count)

Gender	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
Female	251	48.0 %	246	47.1 %	277	50.5 %	340	46.6 %	373	48.4 %
Male	269	51.4 %	273	52.3 %	268	48.8 %	385	52.7 %	391	50.8 %
Not Reported	3	0.6 %	3	0.6 %	4	0.7 %	5	0.7 %	6	0.8 %
Total	523	100.0 %	522	100.0 %	549	100.0 %	730	100.0 %	770	100.0 %

211

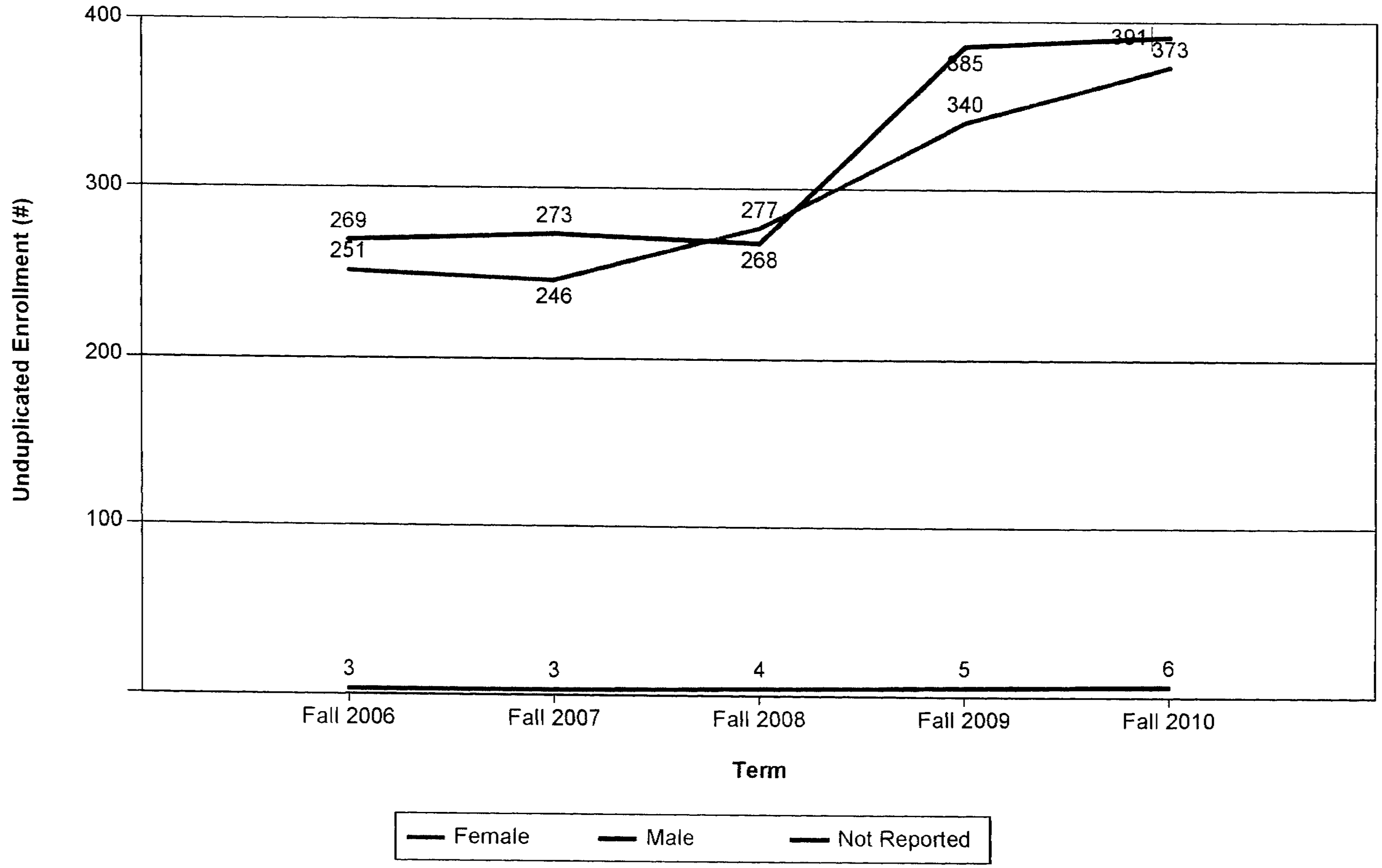
Enrollment by Gender (Duplicated Student Count)



212

Grossmont College Enrollment
GEOG

Enrollment by Gender (Unduplicated Student Count)



213

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Age (Duplicated Student Counts)

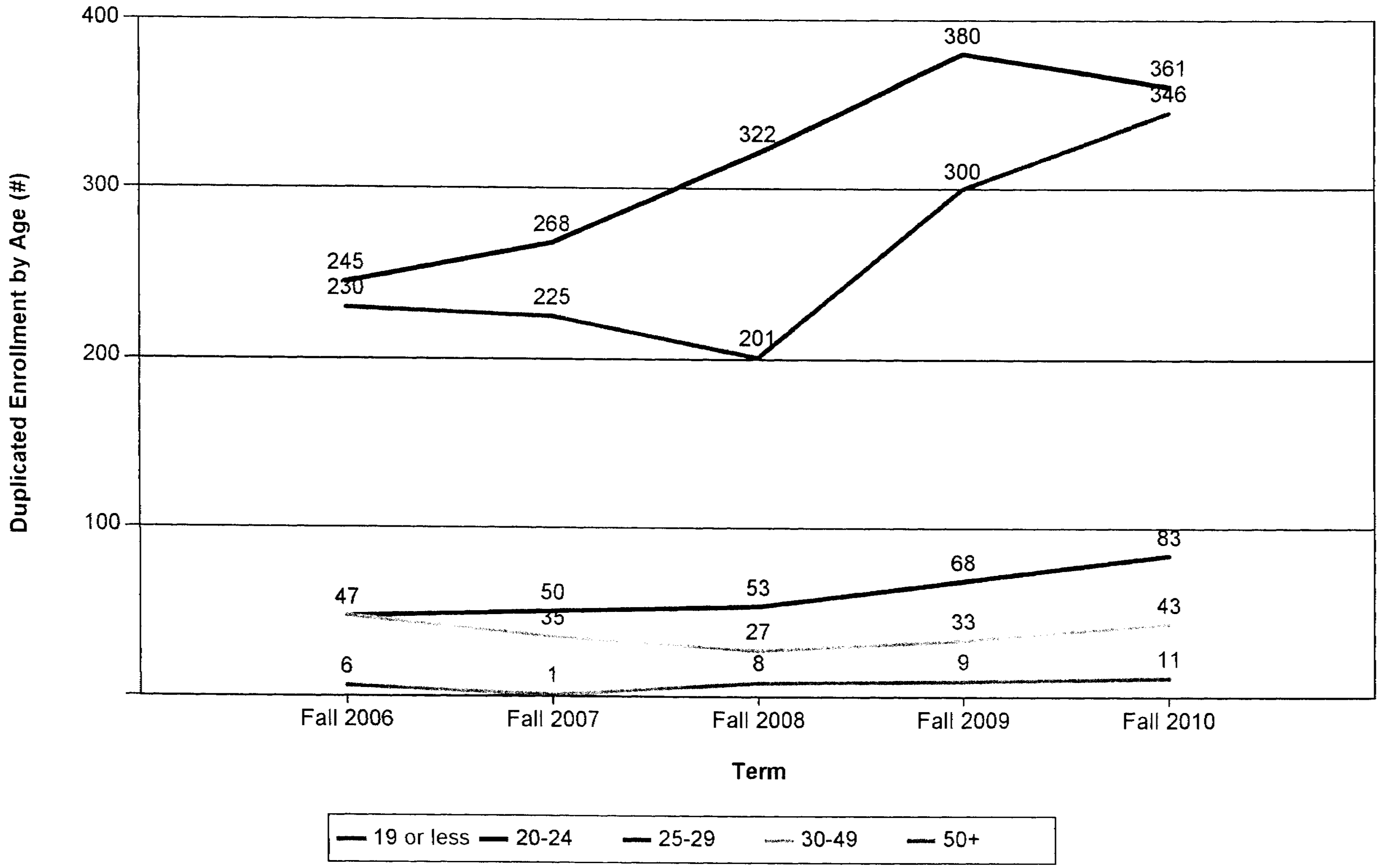
Age	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
19 or less	230	40.0 %	225	38.9 %	201	32.9 %	300	38.0 %	346	41.0 %
20-24	245	42.6 %	268	46.3 %	322	52.7 %	380	48.1 %	361	42.8 %
25-29	47	8.2 %	50	8.6 %	53	8.7 %	68	8.6 %	83	9.8 %
30-49	47	8.2 %	35	6.0 %	27	4.4 %	33	4.2 %	43	5.1 %
50+	6	1.0 %	1	0.2 %	8	1.3 %	9	1.1 %	11	1.3 %
Total	575	100.0 %	579	100.0 %	611	100.0 %	790	100.0 %	844	100.0 %

Enrollment by Age (Unduplicated Student Count)

Age	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
19 or less	211	40.3 %	205	39.3 %	187	34.1 %	283	38.8 %	323	41.9 %
20-24	225	43.0 %	238	45.6 %	288	52.5 %	348	47.7 %	329	42.7 %
25-29	40	7.6 %	47	9.0 %	46	8.4 %	60	8.2 %	71	9.2 %
30-49	41	7.8 %	31	5.9 %	21	3.8 %	31	4.2 %	37	4.8 %
50+	6	1.1 %	1	0.2 %	7	1.3 %	8	1.1 %	10	1.3 %
Total	523	100.0 %	522	100.0 %	549	100.0 %	730	100.0 %	770	100.0 %

214

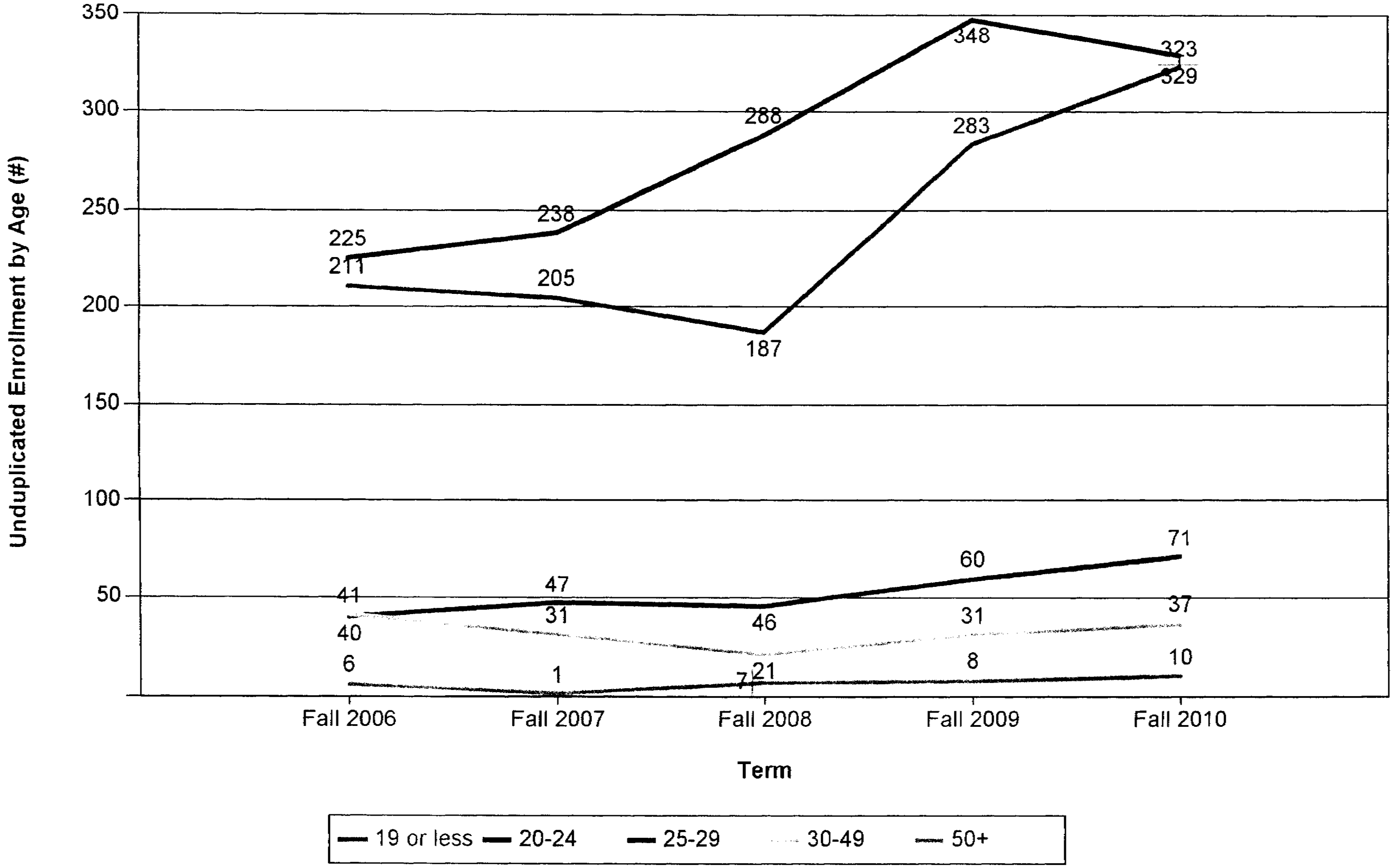
Enrollment by Age (Duplicated Student Count)



Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Age (Unduplicated Student Count)



216

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	7	1.2 %	1	0.2 %	8	1.3 %	10	1.3 %	5	0.6 %
Asian	44	7.7 %	43	7.4 %	59	9.7 %	36	4.6 %	36	4.3 %
Black non-Hispanic	30	5.2 %	38	6.6 %	45	7.4 %	38	4.8 %	56	6.6 %
Filipino	17	3.0 %	15	2.6 %	20	3.3 %	37	4.7 %	32	3.8 %
Hispanic	92	16.0 %	89	15.4 %	124	20.3 %	166	21.0 %	223	26.4 %
Not Reported	56	9.7 %	49	8.5 %	52	8.5 %	57	7.2 %	39	4.6 %
Pacific Islander	7	1.2 %	11	1.9 %	7	1.1 %	13	1.6 %	9	1.1 %
Two or More	12	2.1 %	9	1.6 %	8	1.3 %	38	4.8 %	44	5.2 %
White non-Hispanic	310	53.9 %	324	56.0 %	288	47.1 %	395	50.0 %	400	47.4 %
Total	575	100.0 %	579	100.0 %	611	100.0 %	790	100.0 %	844	100.0 %

Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	7	1.3 %	1	0.2 %	6	1.1 %	9	1.2 %	5	0.6 %
Asian	39	7.5 %	35	6.7 %	47	8.6 %	33	4.5 %	33	4.3 %
Black non-Hispanic	26	5.0 %	35	6.7 %	39	7.1 %	37	5.1 %	49	6.4 %
Filipino	16	3.1 %	13	2.5 %	18	3.3 %	32	4.4 %	29	3.8 %
Hispanic	86	16.4 %	85	16.3 %	115	20.9 %	155	21.2 %	204	26.5 %
Not Reported	46	8.8 %	44	8.4 %	49	8.9 %	53	7.3 %	38	4.9 %
Pacific Islander	7	1.3 %	10	1.9 %	7	1.3 %	12	1.6 %	9	1.2 %
Two or More	12	2.3 %	8	1.5 %	8	1.5 %	33	4.5 %	43	5.6 %
White non-Hispanic	284	54.3 %	291	55.7 %	260	47.4 %	366	50.1 %	360	46.8 %
Total	523	100.0 %	522	100.0 %	549	100.0 %	730	100.0 %	770	100.0 %

217

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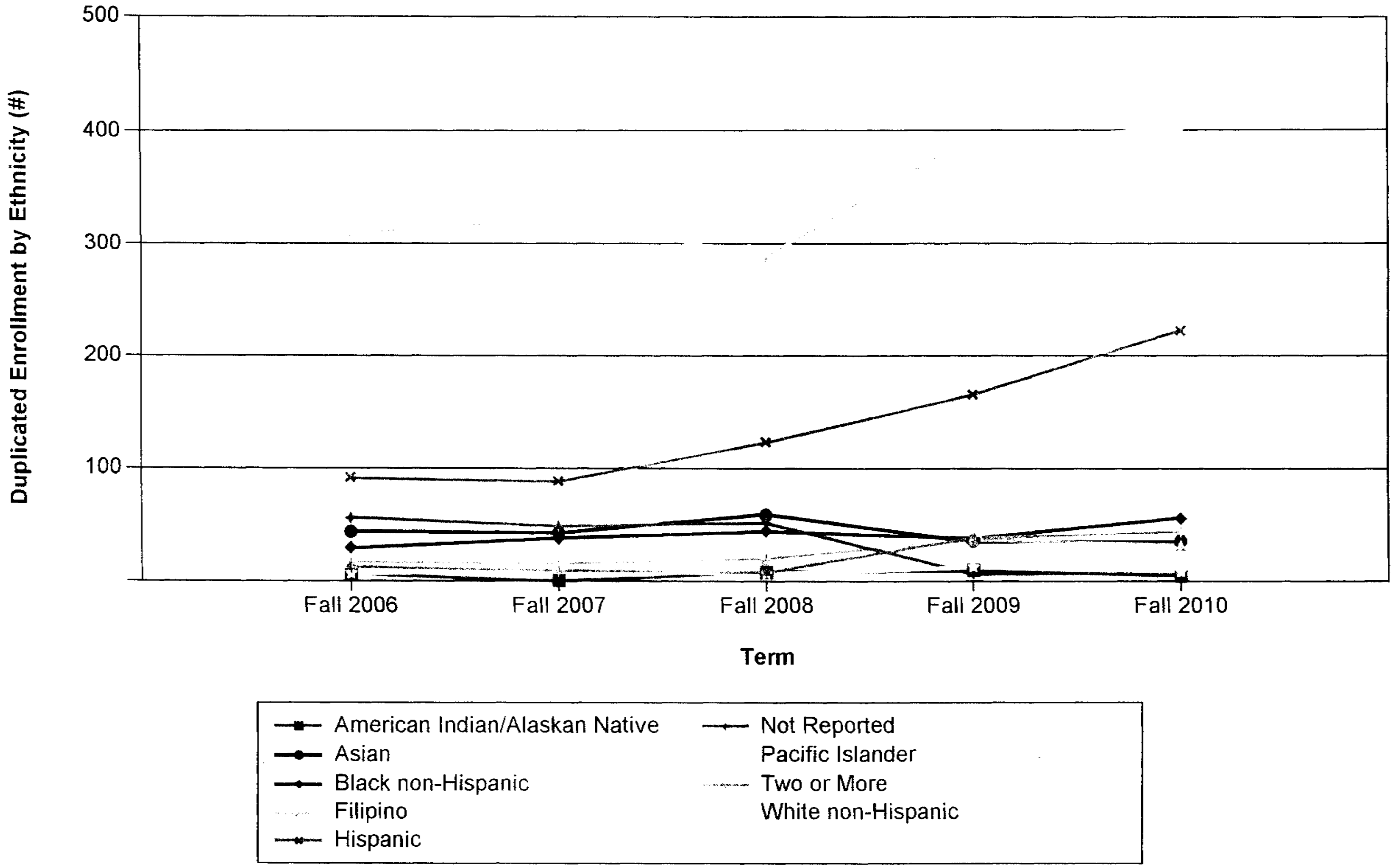
08:51

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Ethnicity (Duplicated Student Count)

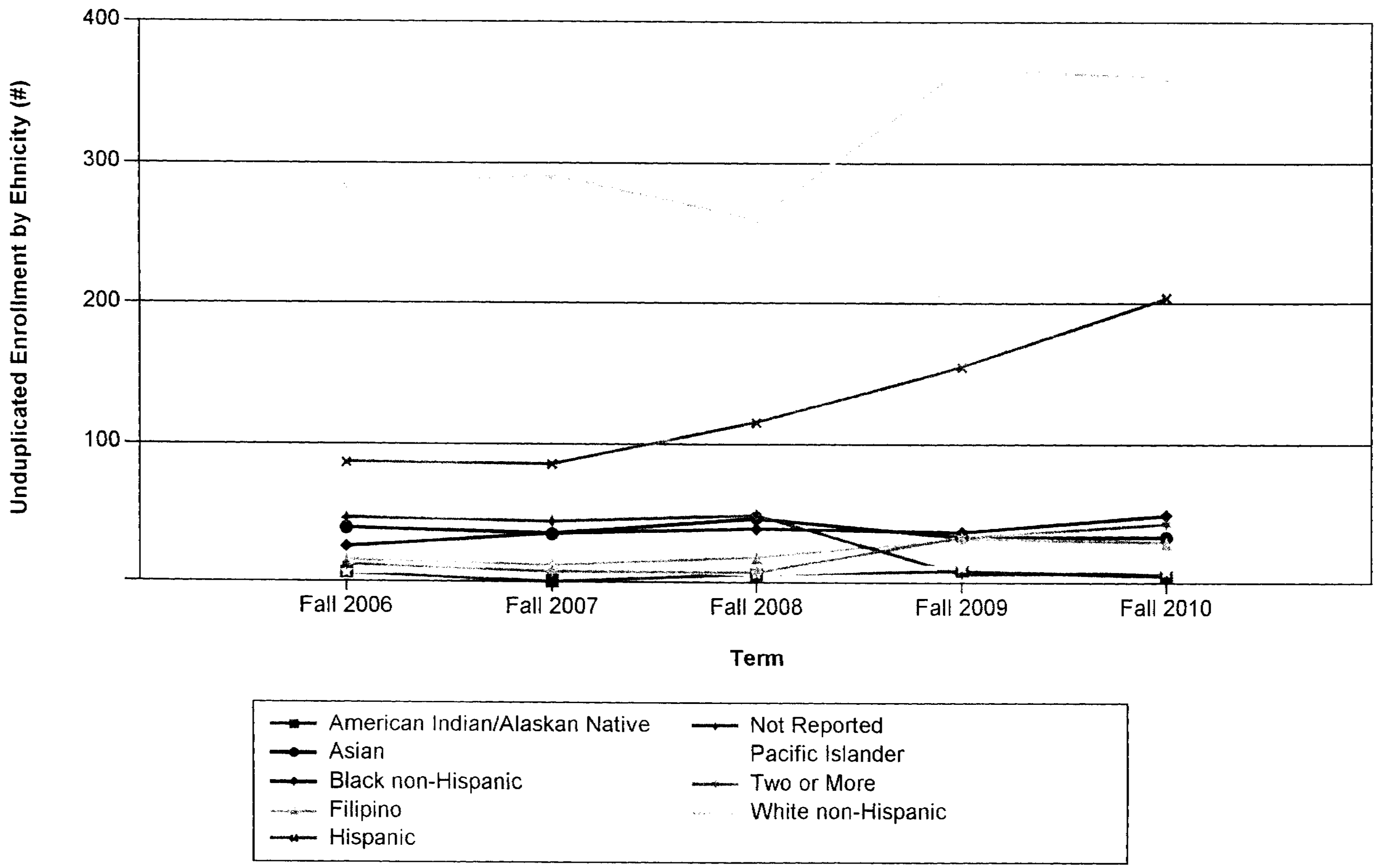


218

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

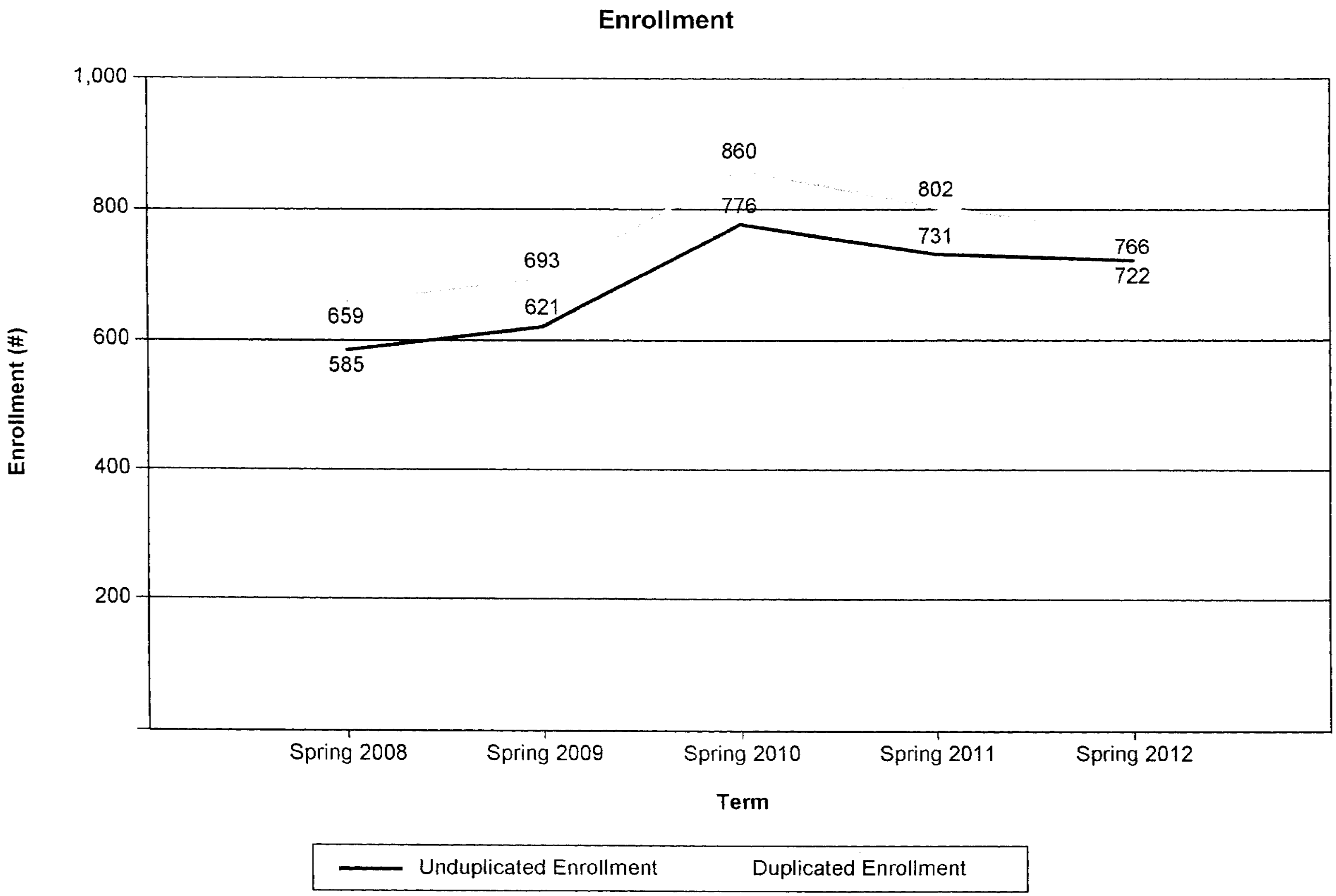
Enrollment by Ethnicity (Unduplicated Student Count)



219

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG



220

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Gender (Duplicated Student Count)

Gender	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
Female	317	48.1 %	353	50.9 %	398	46.3 %	342	42.6 %	336	43.9 %
Male	334	50.7 %	338	48.8 %	453	52.7 %	453	56.5 %	424	55.4 %
Not Reported	8	1.2 %	2	0.3 %	9	1.0 %	7	0.9 %	6	0.8 %
Total	659	100.0 %	693	100.0 %	860	100.0 %	802	100.0 %	766	100.0 %

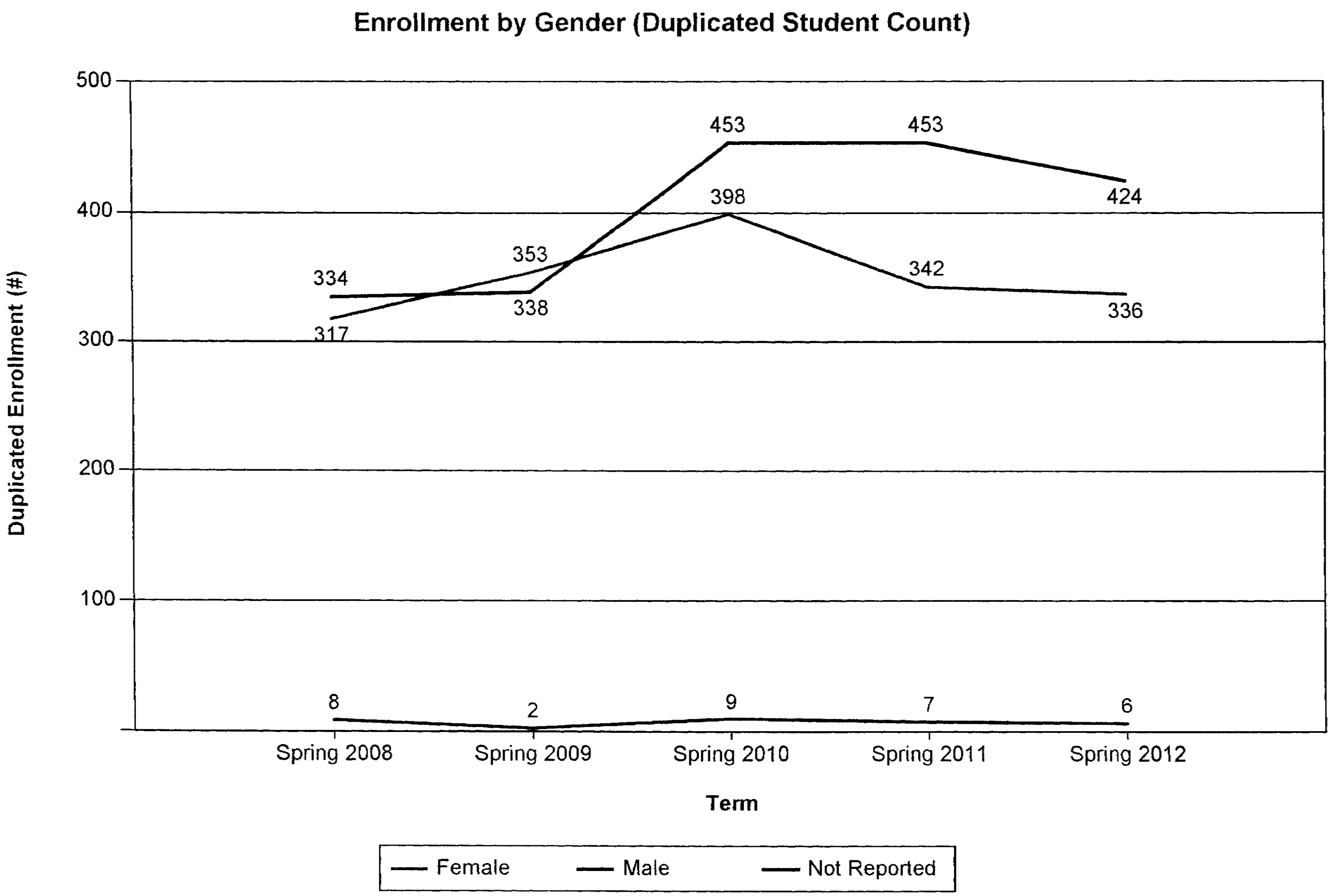
Enrollment by Gender (Unduplicated Student Count)

Gender	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
Female	278	47.5 %	324	52.2 %	360	46.4 %	312	42.7 %	316	43.8 %
Male	299	51.1 %	295	47.5 %	407	52.4 %	412	56.4 %	400	55.4 %
Not Reported	8	1.4 %	2	0.3 %	9	1.2 %	7	1.0 %	6	0.8 %
Total	585	100.0 %	621	100.0 %	776	100.0 %	731	100.0 %	722	100.0 %

221

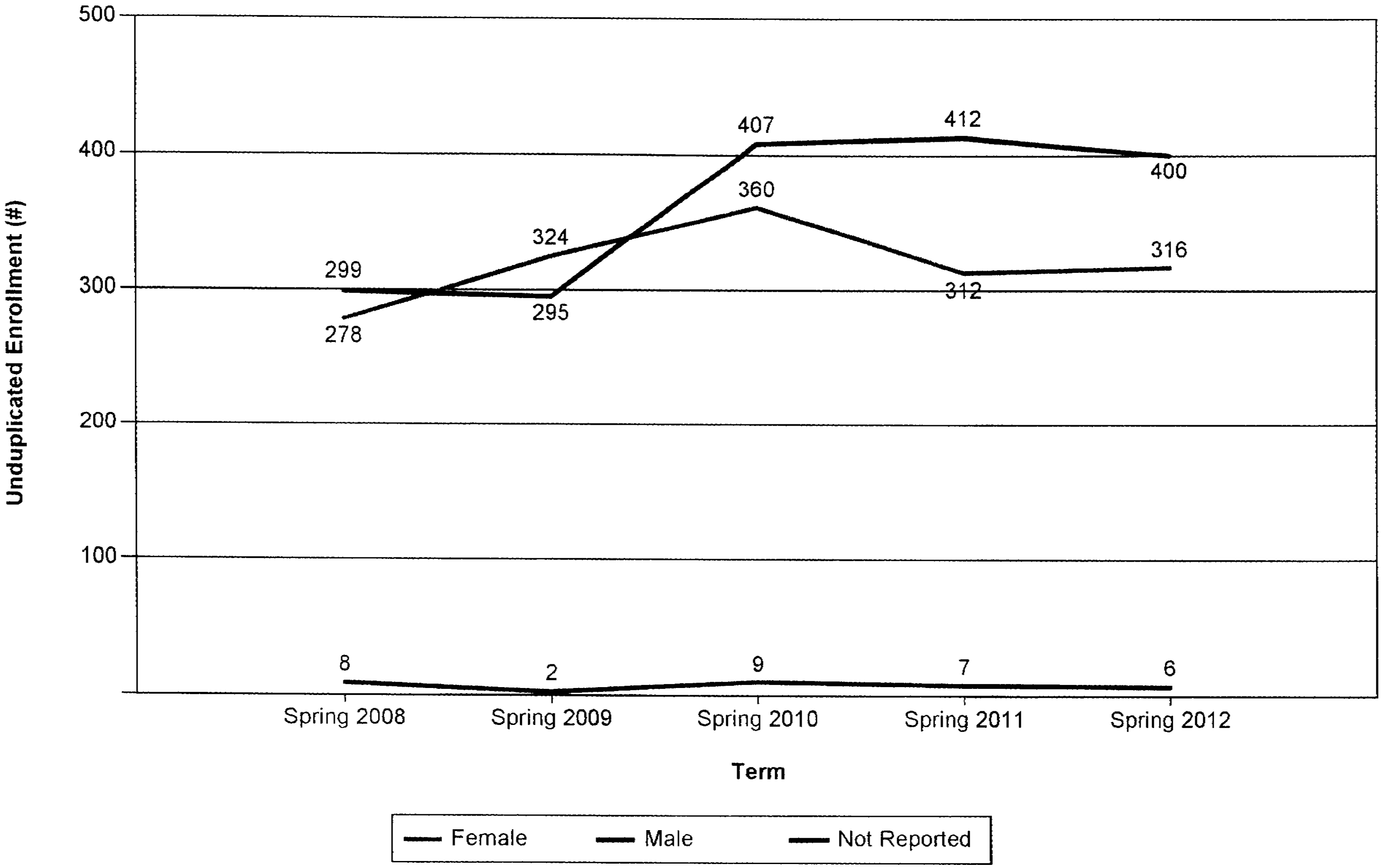
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG



222

Enrollment by Gender (Unduplicated Student Count)



Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount

Grossmont College Enrollment
GEOG

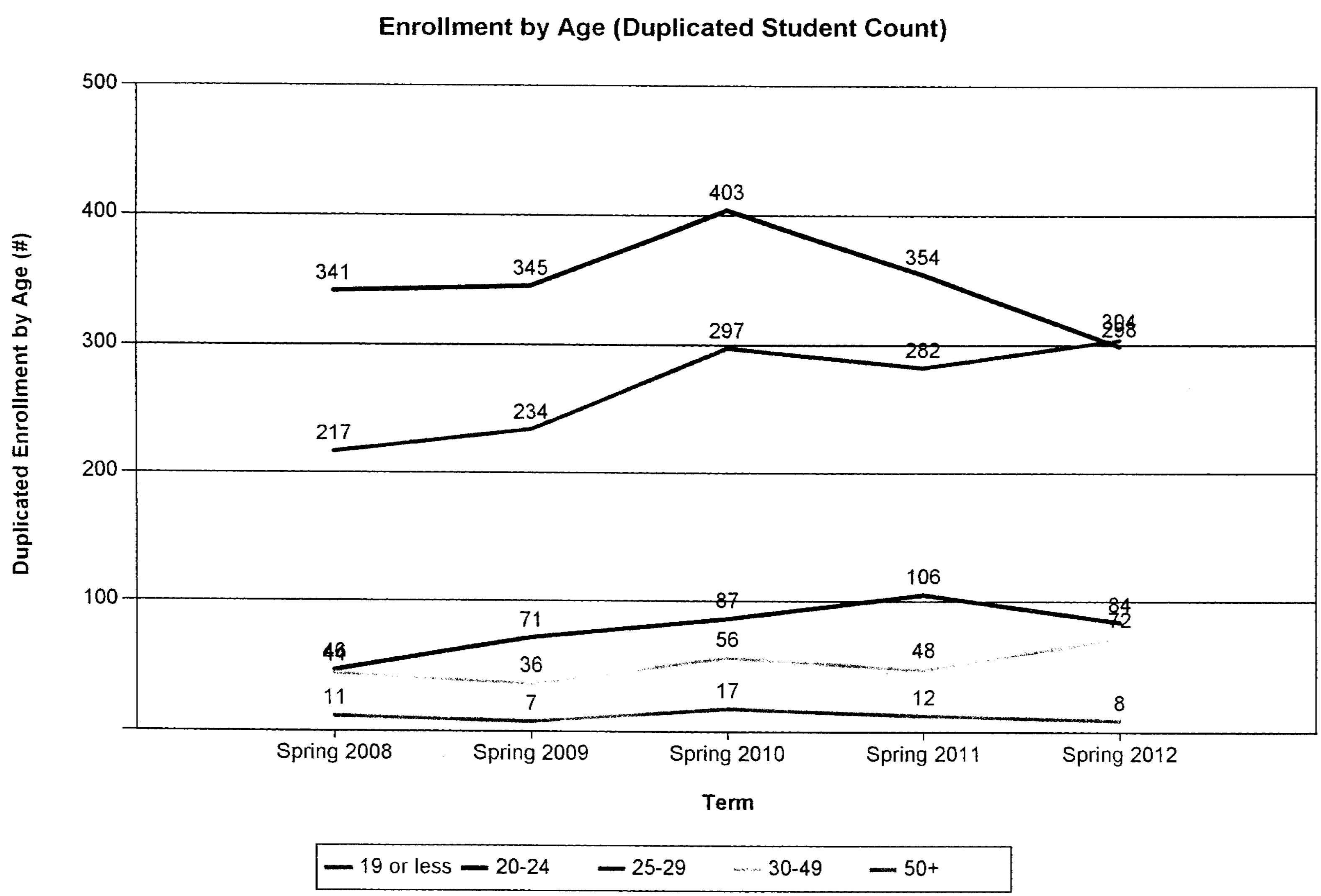
Enrollment by Age (Duplicated Student Counts)

Age	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
19 or less	217	32.9 %	234	33.8 %	297	34.5 %	282	35.2 %	304	39.7 %
20-24	341	51.7 %	345	49.8 %	403	46.9 %	354	44.1 %	298	38.9 %
25-29	46	7.0 %	71	10.2 %	87	10.1 %	106	13.2 %	84	11.0 %
30-49	44	6.7 %	36	5.2 %	56	6.5 %	48	6.0 %	72	9.4 %
50+	11	1.7 %	7	1.0 %	17	2.0 %	12	1.5 %	8	1.0 %
Total	659	100.0 %	693	100.0 %	860	100.0 %	802	100.0 %	766	100.0 %

Enrollment by Age (Unduplicated Student Count)

Age	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
19 or less	199	34.0 %	218	35.1 %	274	35.3 %	264	36.1 %	294	40.7 %
20-24	302	51.6 %	307	49.4 %	362	46.6 %	321	43.9 %	278	38.5 %
25-29	41	7.0 %	60	9.7 %	73	9.4 %	91	12.4 %	77	10.7 %
30-49	35	6.0 %	29	4.7 %	53	6.8 %	44	6.0 %	65	9.0 %
50+	8	1.4 %	7	1.1 %	14	1.8 %	11	1.5 %	8	1.1 %
Total	585	100.0 %	621	100.0 %	776	100.0 %	731	100.0 %	722	100.0 %

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

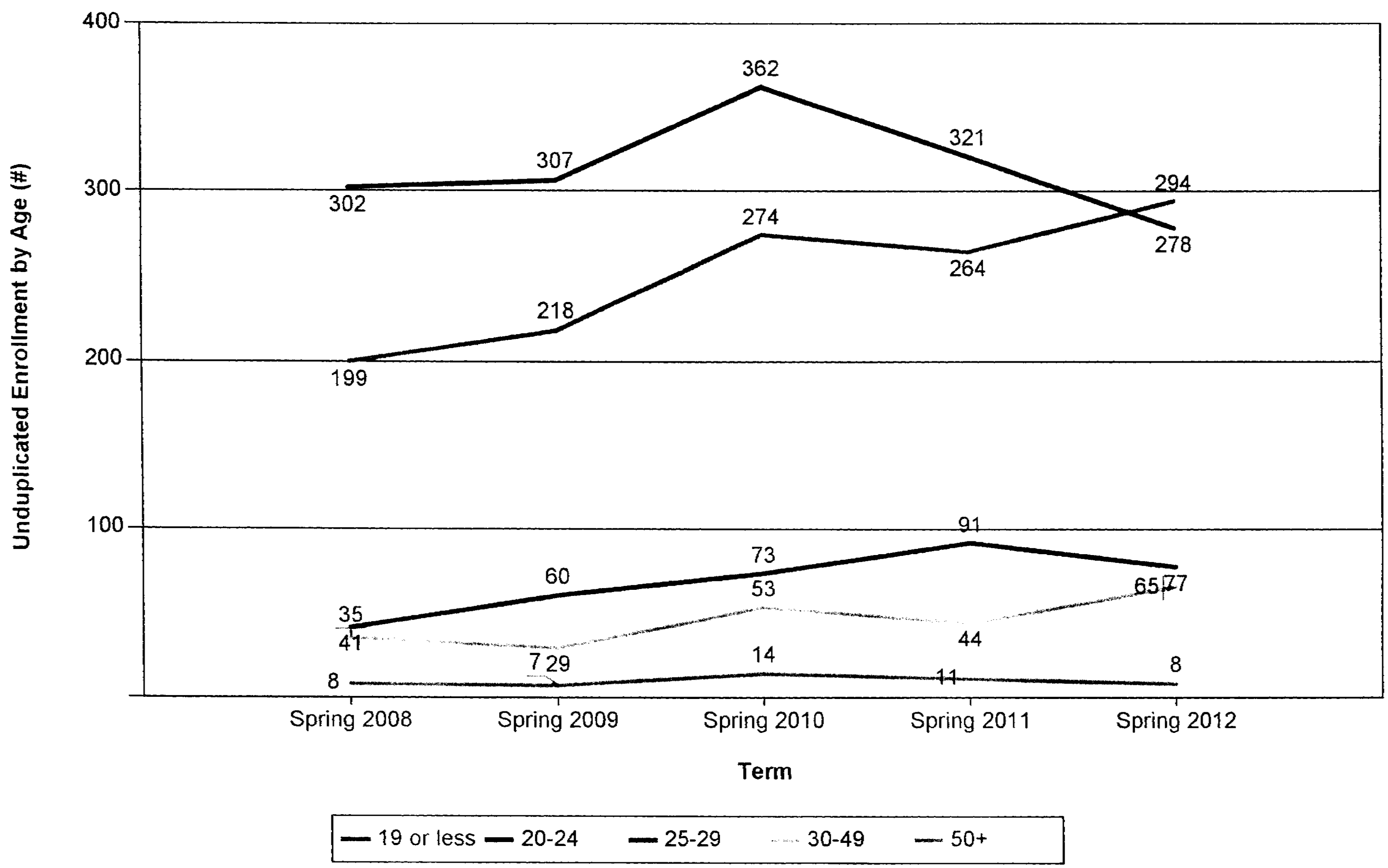


225

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Age (Unduplicated Student Count)



226

Grossmont College Enrollment
GEOG

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	5	0.8 %	12	1.7 %	7	0.8 %	2	0.2 %	3	0.4 %
Asian	47	7.1 %	67	9.7 %	59	6.9 %	47	5.9 %	20	2.6 %
Black non-Hispanic	47	7.1 %	35	5.1 %	55	6.4 %	42	5.2 %	65	8.5 %
Filipino	13	2.0 %	22	3.2 %	30	3.5 %	24	3.0 %	21	2.7 %
Hispanic	124	18.8 %	132	19.0 %	181	21.0 %	214	26.7 %	241	31.5 %
Not Reported	66	10.0 %	64	9.2 %	66	7.7 %	29	3.6 %	15	2.0 %
Pacific Islander	10	1.5 %	10	1.4 %	13	1.5 %	9	1.1 %	6	0.8 %
Two or More	12	1.8 %	13	1.9 %	31	3.6 %	51	6.4 %	49	6.4 %
White non-Hispanic	335	50.8 %	338	48.8 %	418	48.6 %	384	47.9 %	346	45.2 %
Total	659	100.0 %	693	100.0 %	860	100.0 %	802	100.0 %	766	100.0 %

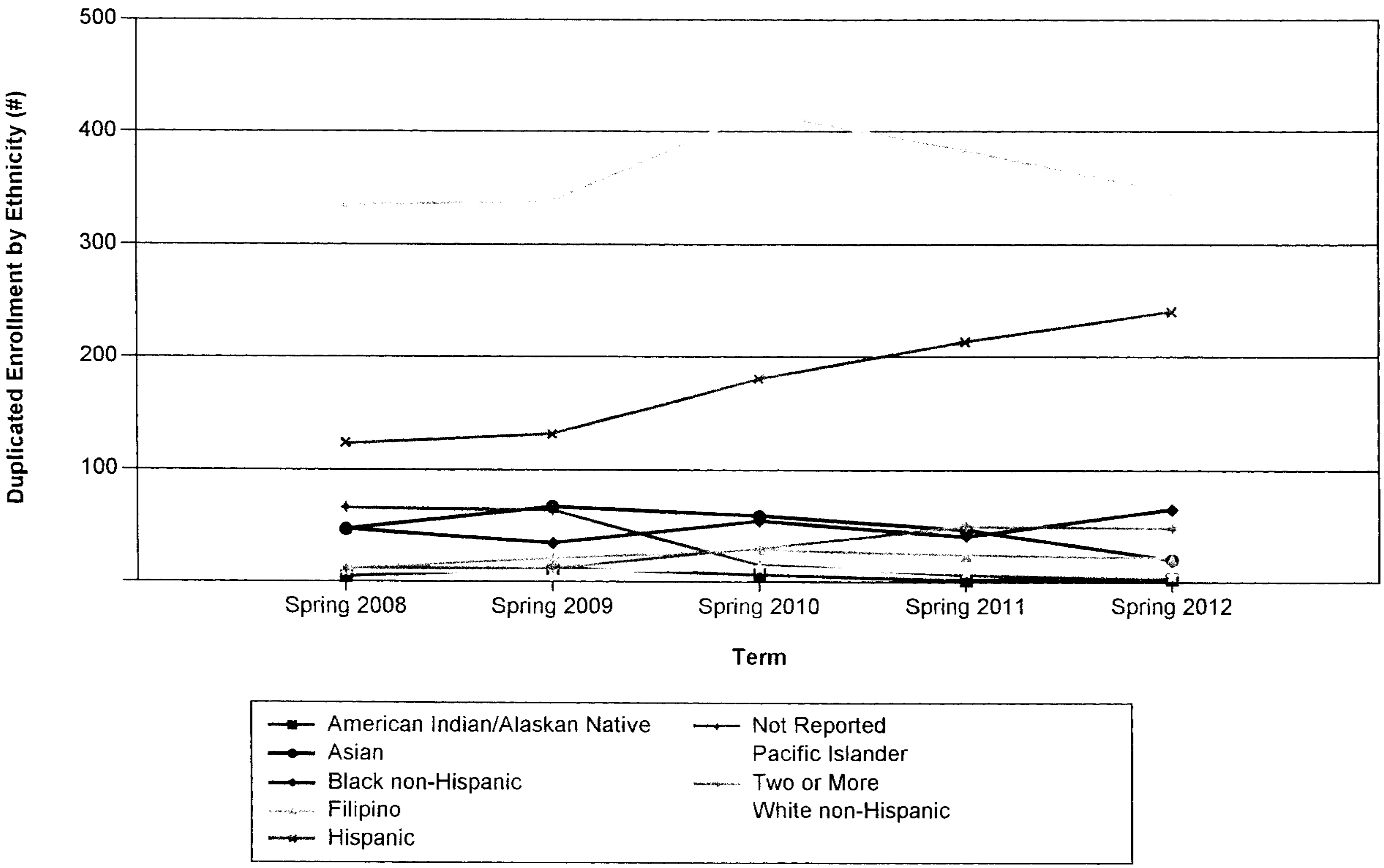
Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	4	0.7 %	9	1.4 %	6	0.8 %	2	0.3 %	3	0.4 %
Asian	42	7.2 %	54	8.7 %	49	6.3 %	41	5.6 %	19	2.6 %
Black non-Hispanic	42	7.2 %	32	5.2 %	52	6.7 %	40	5.5 %	61	8.4 %
Filipino	12	2.1 %	20	3.2 %	29	3.7 %	24	3.3 %	21	2.9 %
Hispanic	113	19.3 %	123	19.8 %	164	21.1 %	202	27.6 %	229	31.7 %
Not Reported	55	9.4 %	55	8.9 %	59	7.6 %	26	3.6 %	15	2.1 %
Pacific Islander	9	1.5 %	10	1.6 %	12	1.5 %	8	1.1 %	6	0.8 %
Two or More	11	1.9 %	13	2.1 %	31	4.0 %	48	6.6 %	44	6.1 %
White non-Hispanic	297	50.8 %	305	49.1 %	374	48.2 %	340	46.5 %	324	44.9 %
Total	585	100.0 %	621	100.0 %	776	100.0 %	731	100.0 %	722	100.0 %

227

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

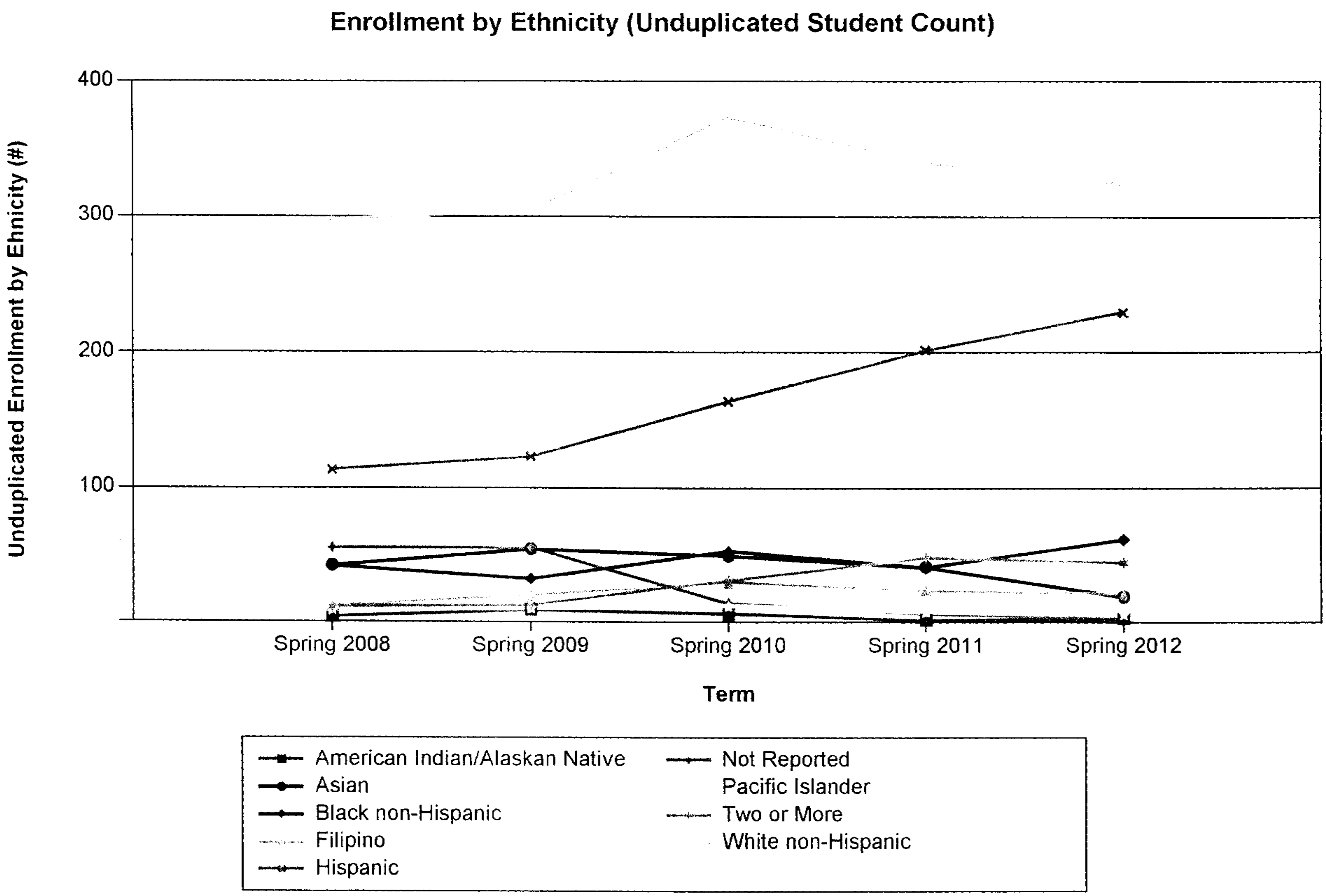
Enrollment by Ethnicity (Duplicated Student Count)



228

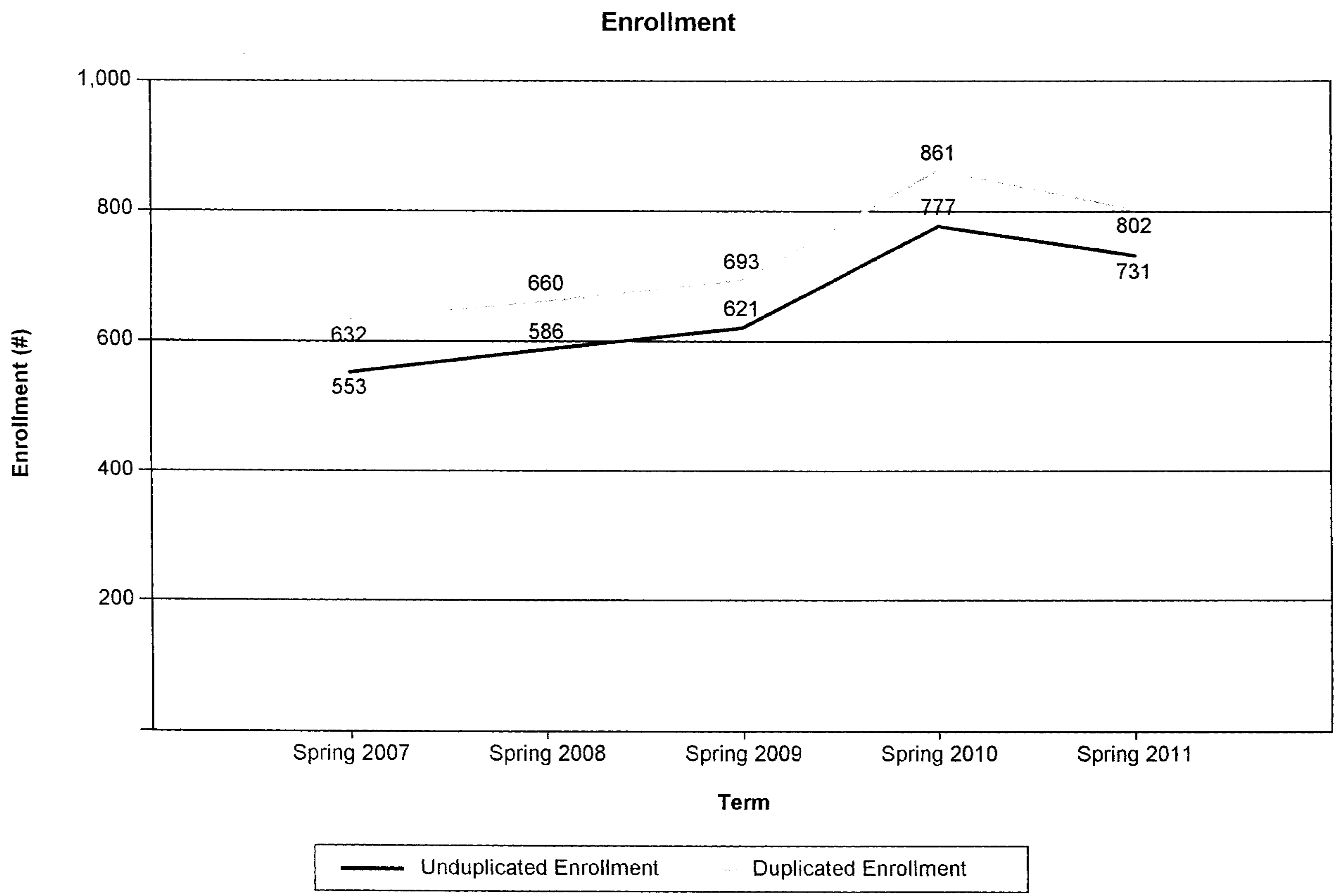
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG



229

Grossmont College Enrollment
GEOG



230

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Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Gender (Duplicated Student Count)

Gender	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
Female	289	45.7 %	318	48.2 %	353	50.9 %	397	46.1 %	342	42.6 %
Male	339	53.6 %	334	50.6 %	338	48.8 %	454	52.7 %	453	56.5 %
Not Reported	4	0.6 %	8	1.2 %	2	0.3 %	10	1.2 %	7	0.9 %
Total	632	100.0 %	660	100.0 %	693	100.0 %	861	100.0 %	802	100.0 %

Enrollment by Gender (Unduplicated Student Count)

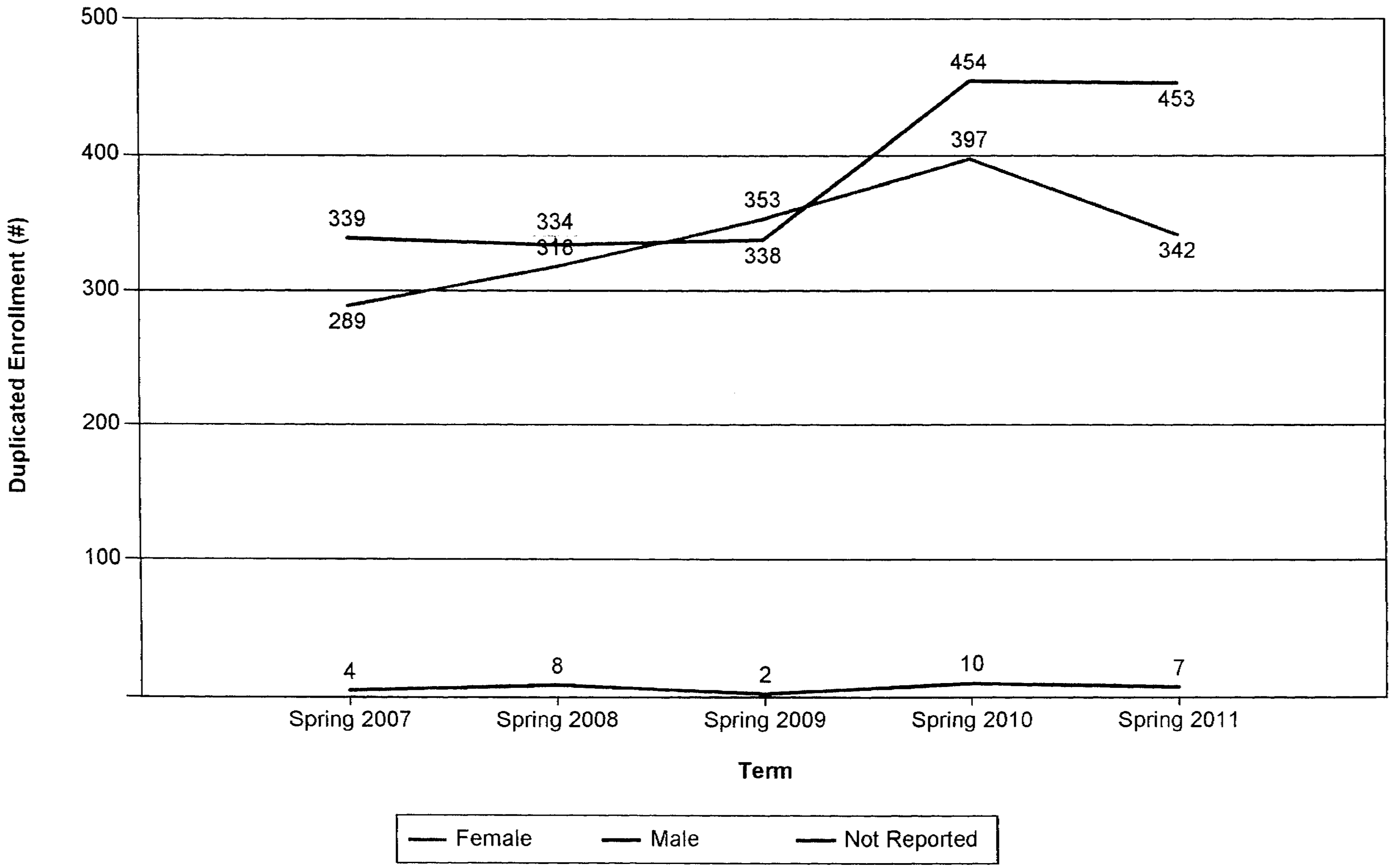
Gender	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
Female	265	47.9 %	279	47.6 %	324	52.2 %	359	46.2 %	312	42.7 %
Male	285	51.5 %	299	51.0 %	295	47.5 %	408	52.5 %	412	56.4 %
Not Reported	3	0.5 %	8	1.4 %	2	0.3 %	10	1.3 %	7	1.0 %
Total	553	100.0 %	586	100.0 %	621	100.0 %	777	100.0 %	731	100.0 %

231

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

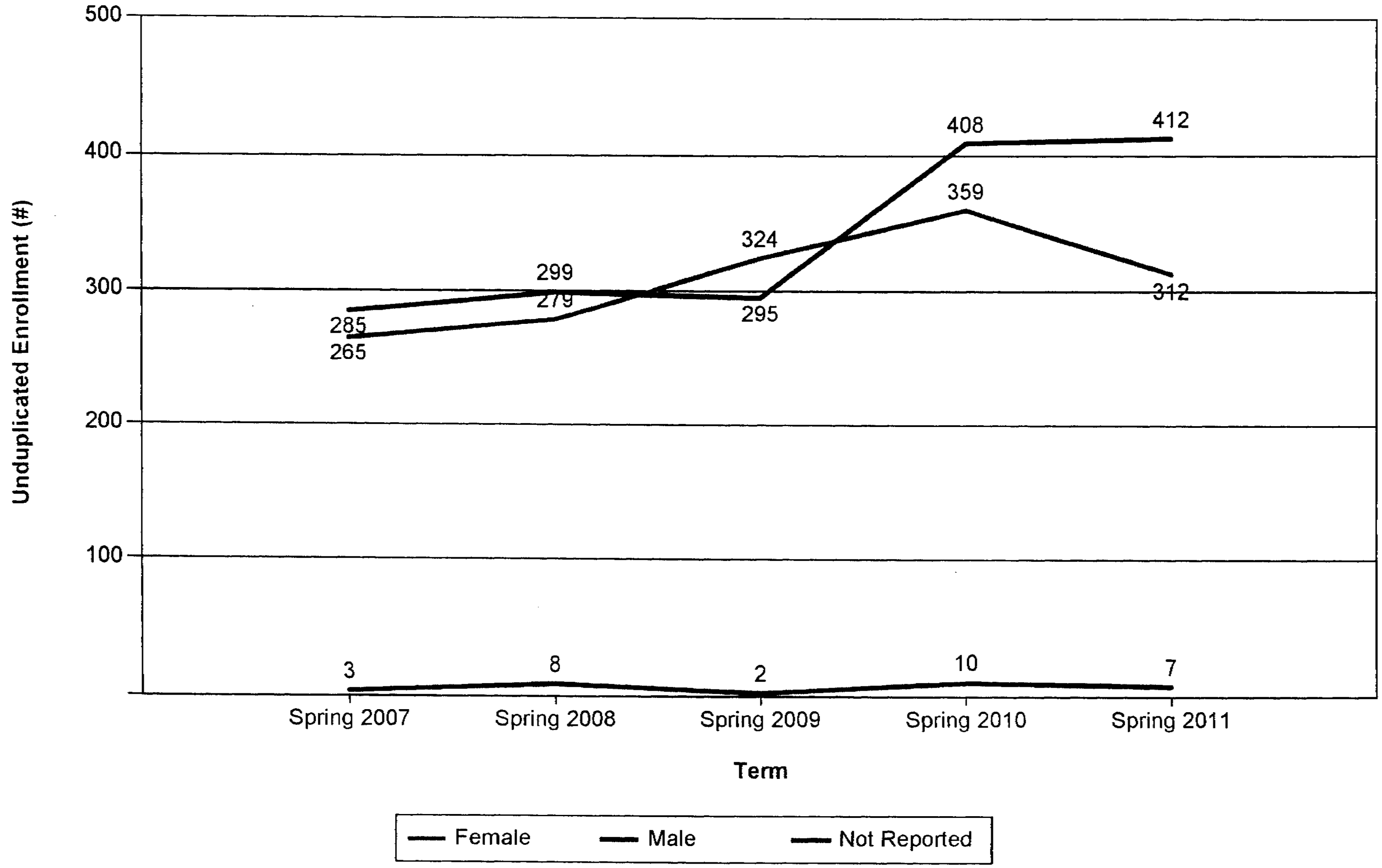
Grossmont College Enrollment
GEOG

Enrollment by Gender (Duplicated Student Count)



Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Gender (Unduplicated Student Count)



233

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Age (Duplicated Student Counts)

Age	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	224	35.4 %	217	32.9 %	234	33.8 %	297	34.5 %	282	35.2 %
20-24	275	43.5 %	342	51.8 %	345	49.8 %	404	46.9 %	354	44.1 %
25-29	65	10.3 %	46	7.0 %	71	10.2 %	87	10.1 %	106	13.2 %
30-49	59	9.3 %	44	6.7 %	36	5.2 %	56	6.5 %	48	6.0 %
50+	9	1.4 %	11	1.7 %	7	1.0 %	17	2.0 %	12	1.5 %
Total	632	100.0 %	660	100.0 %	693	100.0 %	861	100.0 %	802	100.0 %

Enrollment by Age (Unduplicated Student Count)

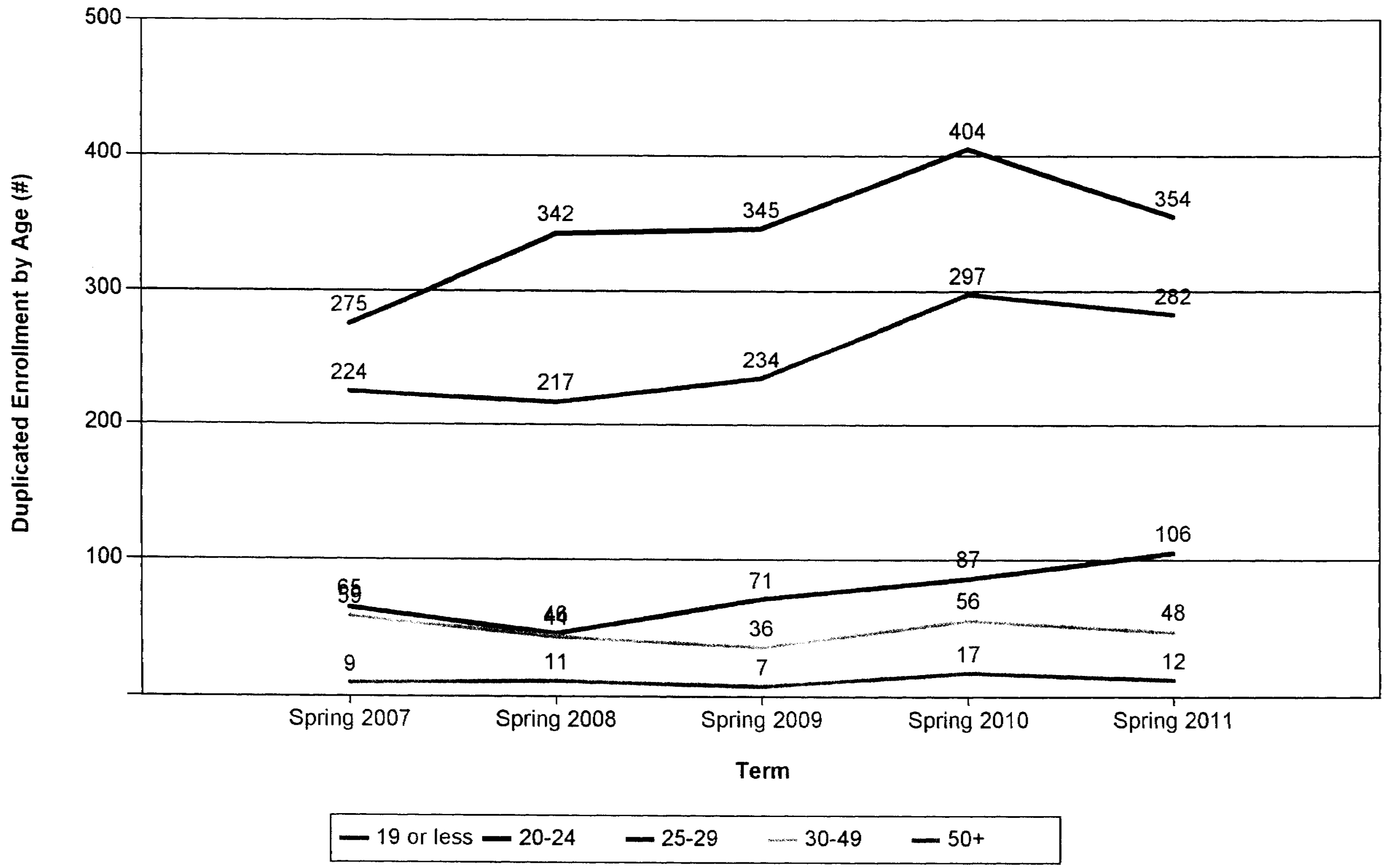
Age	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	206	37.3 %	199	34.0 %	218	35.1 %	274	35.3 %	264	36.1 %
20-24	234	42.3 %	303	51.7 %	307	49.4 %	363	46.7 %	321	43.9 %
25-29	55	9.9 %	41	7.0 %	60	9.7 %	73	9.4 %	91	12.4 %
30-49	50	9.0 %	35	6.0 %	29	4.7 %	53	6.8 %	44	6.0 %
50+	8	1.4 %	8	1.4 %	7	1.1 %	14	1.8 %	11	1.5 %
Total	553	100.0 %	586	100.0 %	621	100.0 %	777	100.0 %	731	100.0 %

234

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

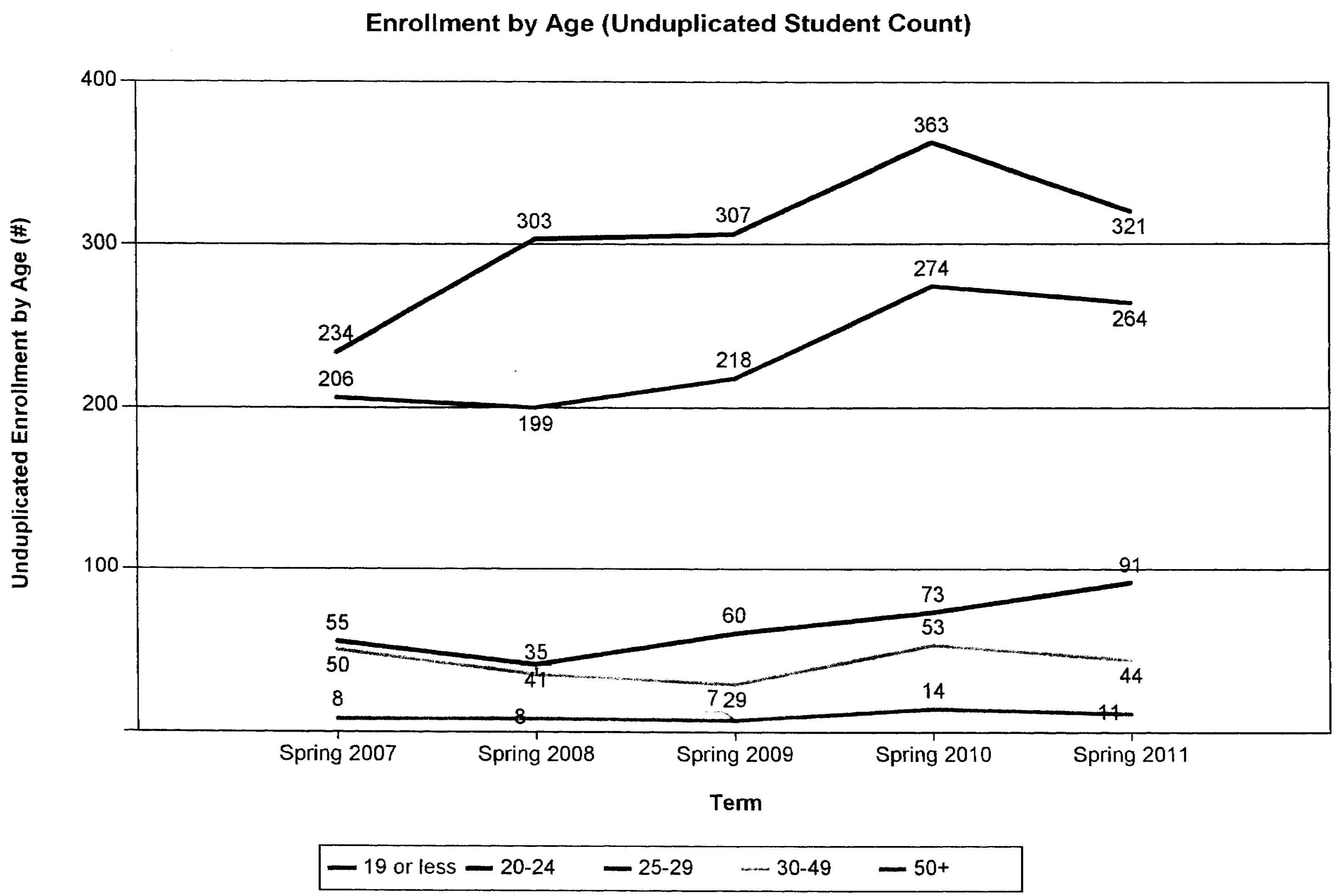
Enrollment by Age (Duplicated Student Count)



235

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG



236

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOG

Enrollment by Ethnicity (Duplicated Student Counts)

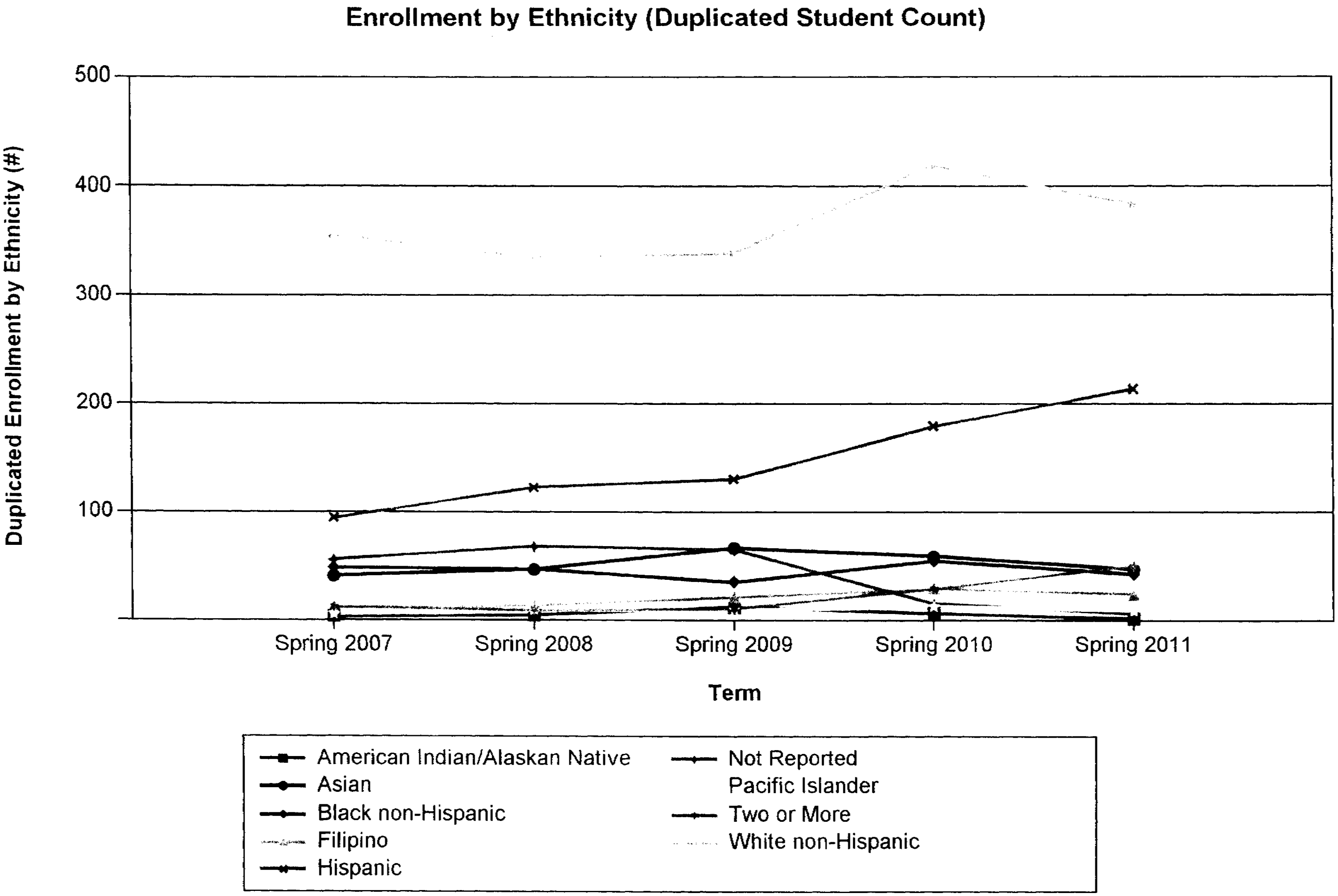
Ethnicity	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	4	0.6 %	5	0.8 %	12	1.7 %	7	0.8 %	2	0.2 %
Asian	41	6.5 %	47	7.1 %	67	9.7 %	59	6.9 %	47	5.9 %
Black non-Hispanic	49	7.8 %	47	7.1 %	36	5.2 %	55	6.4 %	43	5.4 %
Filipino	13	2.1 %	14	2.1 %	22	3.2 %	30	3.5 %	24	3.0 %
Hispanic	95	15.0 %	123	18.6 %	131	18.9 %	180	20.9 %	214	26.7 %
Not Reported	56	8.9 %	68	10.3 %	65	9.4 %	68	7.9 %	29	3.6 %
Pacific Islander	6	0.9 %	10	1.5 %	10	1.4 %	13	1.5 %	9	1.1 %
Two or More	13	2.1 %	10	1.5 %	11	1.6 %	30	3.5 %	50	6.2 %
White non-Hispanic	355	56.2 %	336	50.9 %	339	48.9 %	419	48.7 %	384	47.9 %
Total	632	100.0 %	660	100.0 %	693	100.0 %	861	100.0 %	802	100.0 %

Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	4	0.7 %	4	0.7 %	9	1.4 %	6	0.8 %	2	0.3 %
Asian	36	6.5 %	42	7.2 %	54	8.7 %	49	6.3 %	41	5.6 %
Black non-Hispanic	38	6.9 %	42	7.2 %	33	5.3 %	52	6.7 %	41	5.6 %
Filipino	12	2.2 %	13	2.2 %	20	3.2 %	29	3.7 %	24	3.3 %
Hispanic	90	16.3 %	112	19.1 %	122	19.6 %	163	21.0 %	202	27.6 %
Not Reported	44	8.0 %	57	9.7 %	56	9.0 %	61	7.9 %	26	3.6 %
Pacific Islander	6	1.1 %	9	1.5 %	10	1.6 %	12	1.5 %	8	1.1 %
Two or More	11	2.0 %	9	1.5 %	11	1.8 %	30	3.9 %	47	6.4 %
White non-Hispanic	312	56.4 %	298	50.9 %	306	49.3 %	375	48.3 %	340	46.5 %
Total	553	100.0 %	586	100.0 %	621	100.0 %	777	100.0 %	731	100.0 %

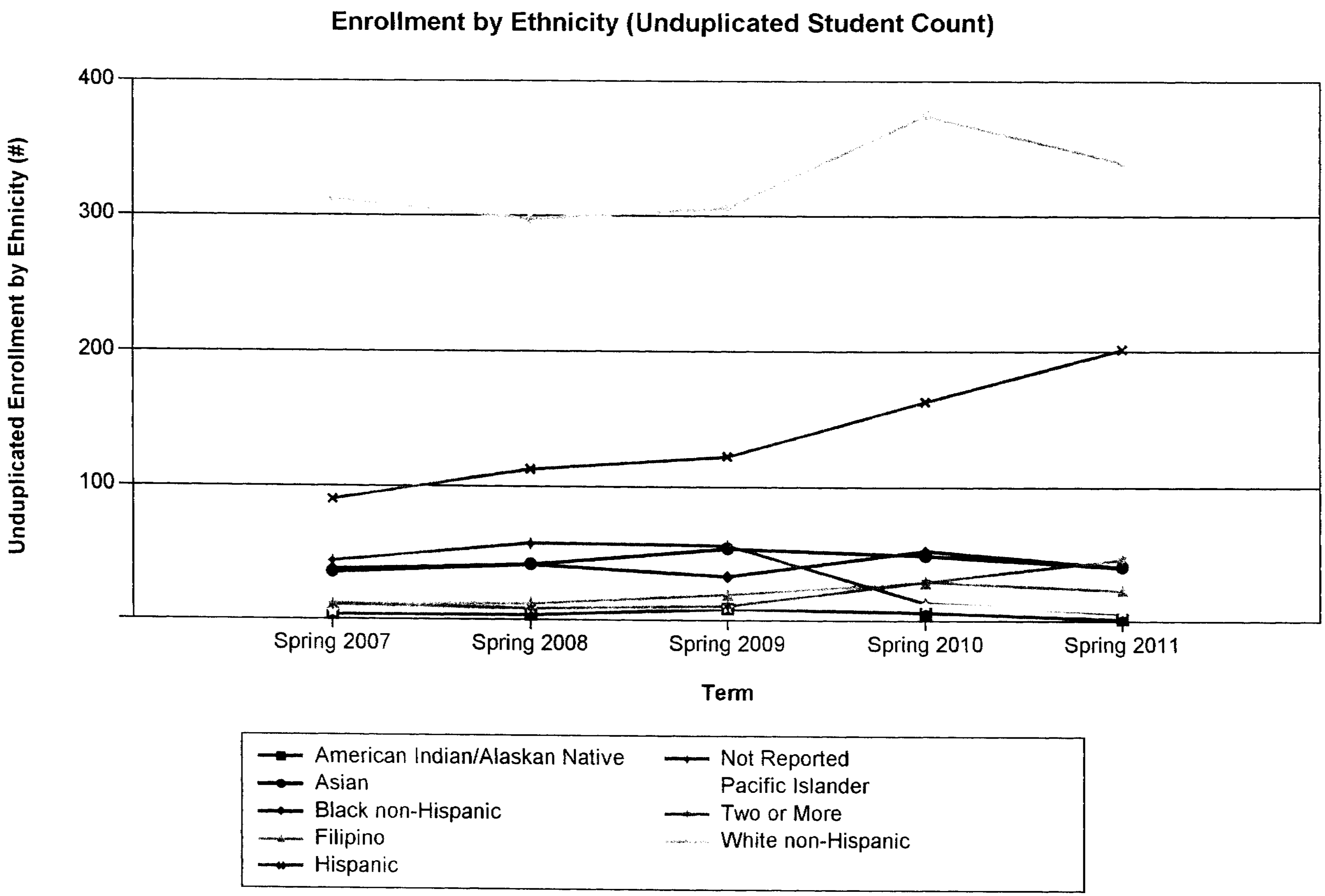
237

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.



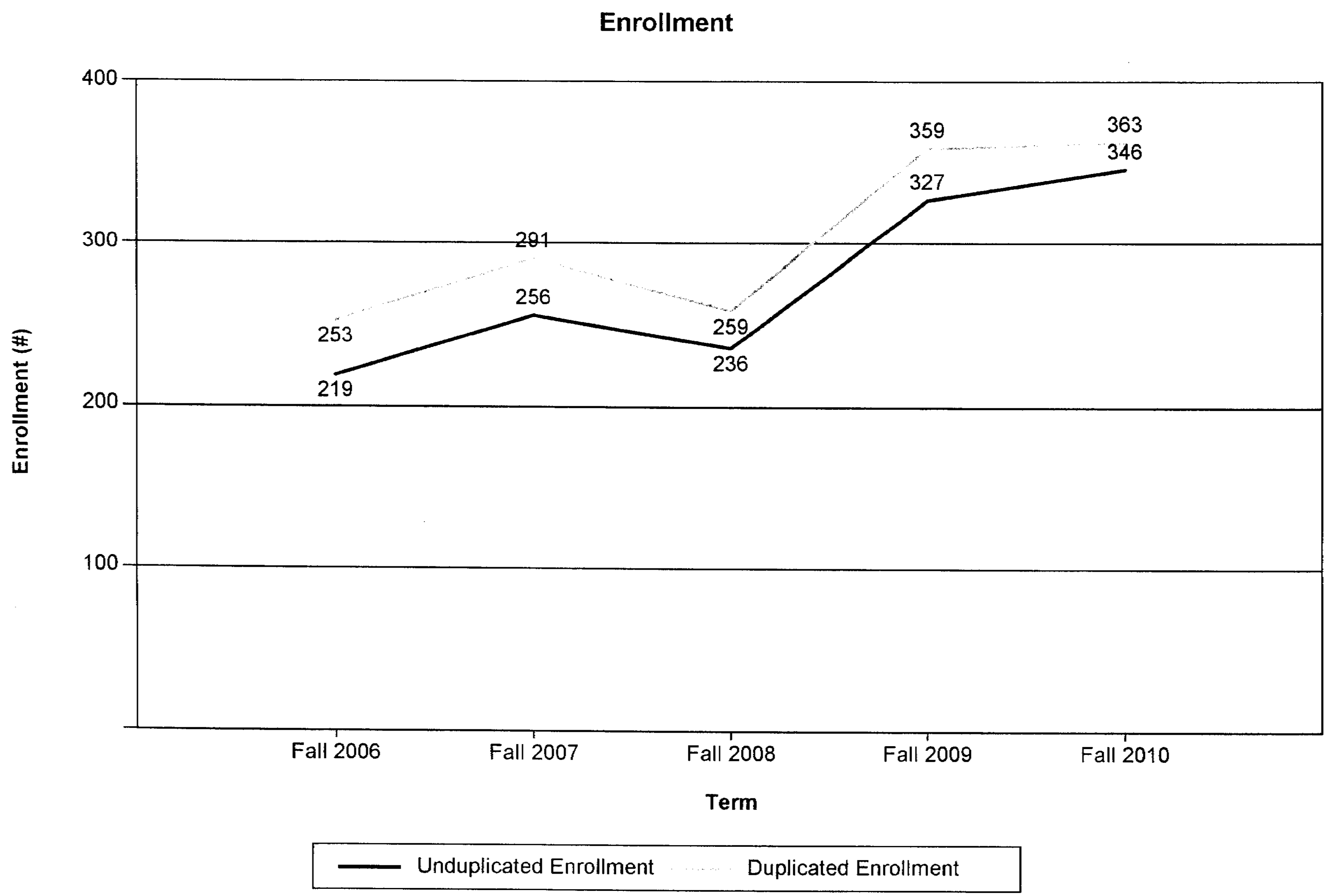
238

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.



Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL



241

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Gender (Duplicated Student Count)

Gender	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
Female	146	57.7 %	161	55.3 %	148	57.1 %	196	54.6 %	197	54.3 %
Male	105	41.5 %	127	43.6 %	110	42.5 %	160	44.6 %	165	45.5 %
Not Reported	2	0.8 %	3	1.0 %	1	0.4 %	3	0.8 %	1	0.3 %
Total	253	100.0 %	291	100.0 %	259	100.0 %	359	100.0 %	363	100.0 %

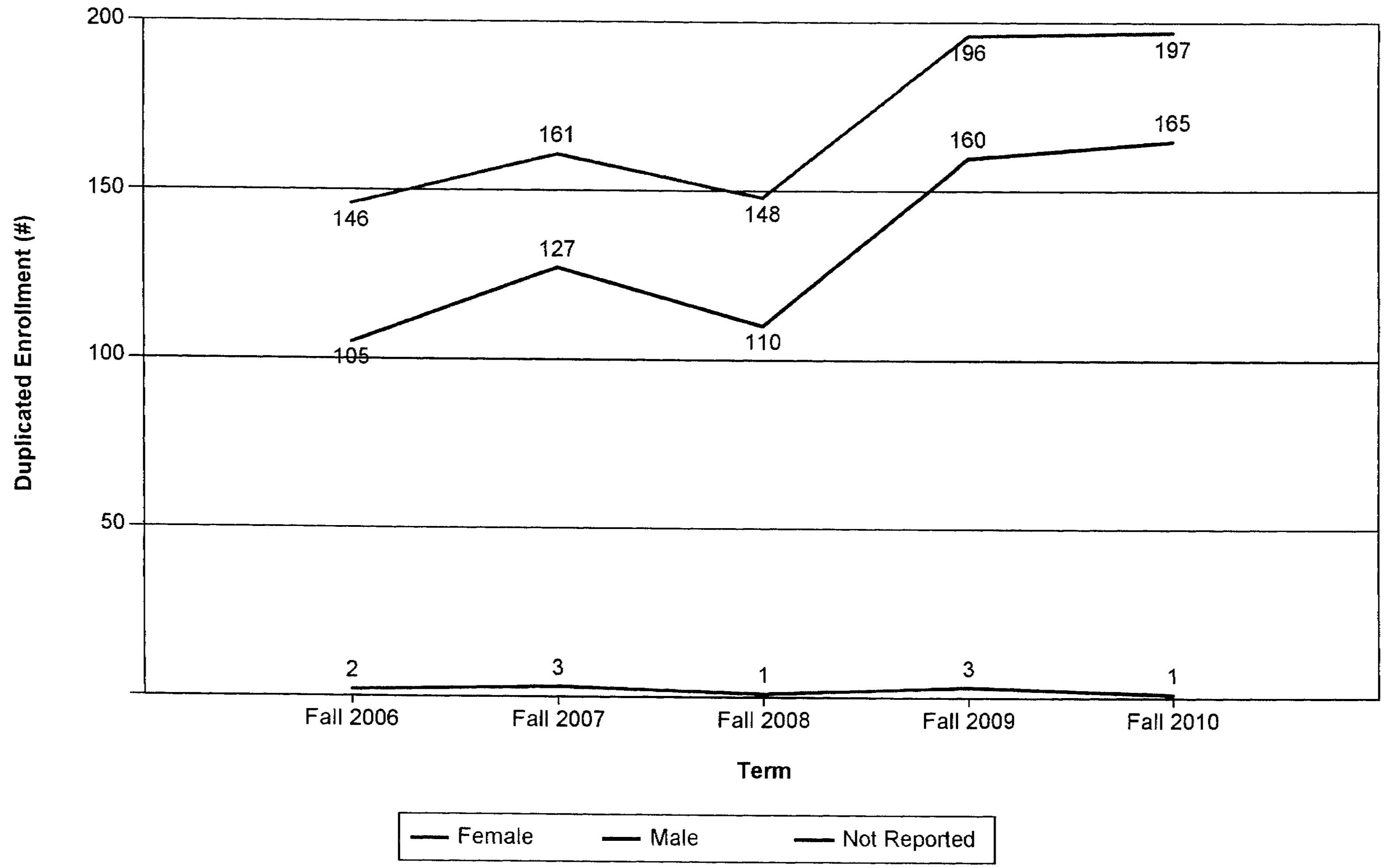
Enrollment by Gender (Unduplicated Student Count)

Gender	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
Female	127	58.0 %	140	54.7 %	139	58.9 %	182	55.7 %	188	54.3 %
Male	90	41.1 %	113	44.1 %	96	40.7 %	142	43.4 %	157	45.4 %
Not Reported	2	0.9 %	3	1.2 %	1	0.4 %	3	0.9 %	1	0.3 %
Total	219	100.0 %	256	100.0 %	236	100.0 %	327	100.0 %	346	100.0 %

242

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount

Enrollment by Gender (Duplicated Student Count)



243

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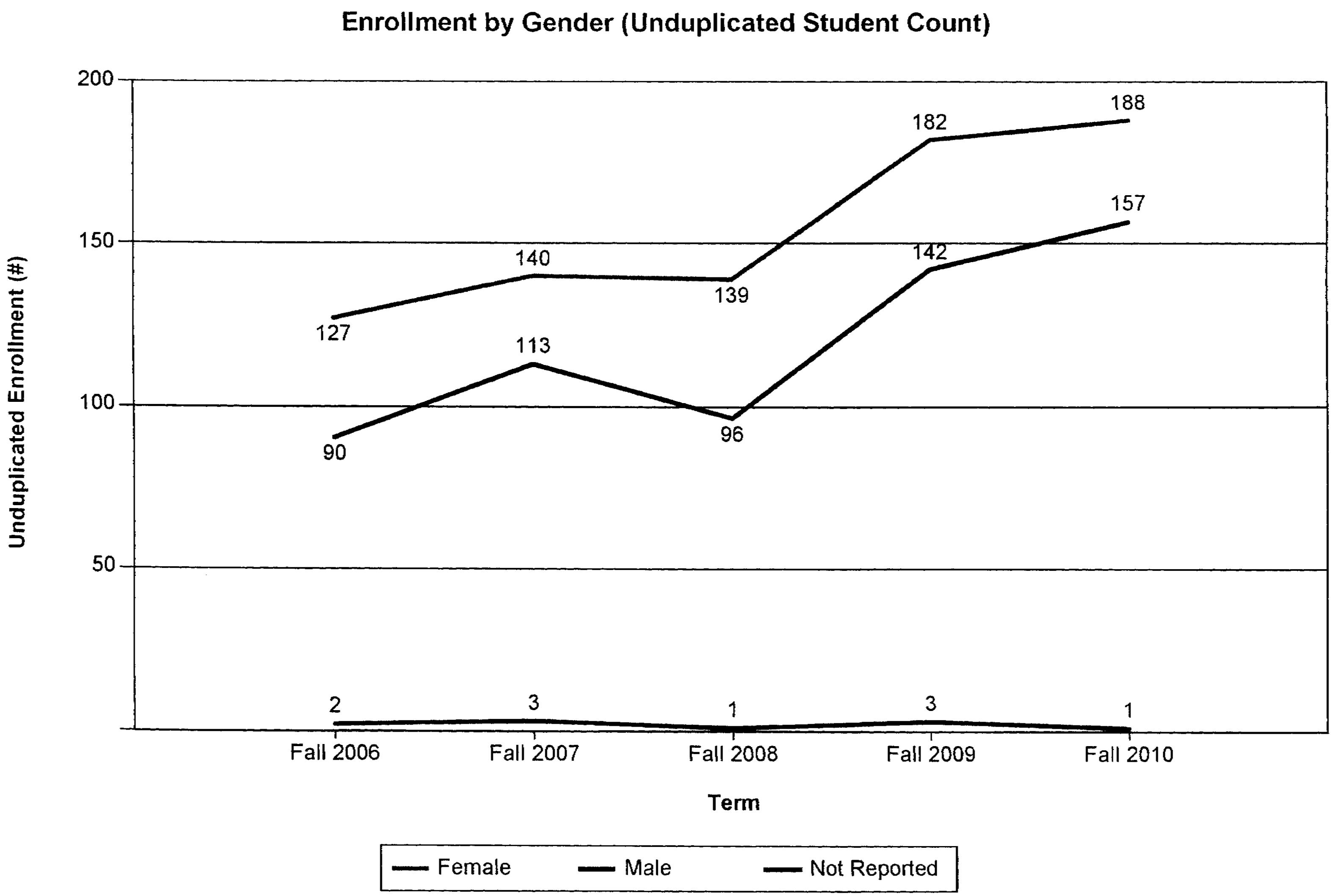
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL



244

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Age (Duplicated Student Counts)

Age	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
19 or less	65	25.7 %	108	37.1 %	69	26.6 %	96	26.7 %	145	39.9 %
20-24	125	49.4 %	127	43.6 %	123	47.5 %	169	47.1 %	128	35.3 %
25-29	22	8.7 %	22	7.6 %	26	10.0 %	43	12.0 %	46	12.7 %
30-49	25	9.9 %	26	8.9 %	30	11.6 %	41	11.4 %	28	7.7 %
50+	16	6.3 %	8	2.7 %	11	4.2 %	10	2.8 %	16	4.4 %
Total	253	100.0 %	291	100.0 %	259	100.0 %	359	100.0 %	363	100.0 %

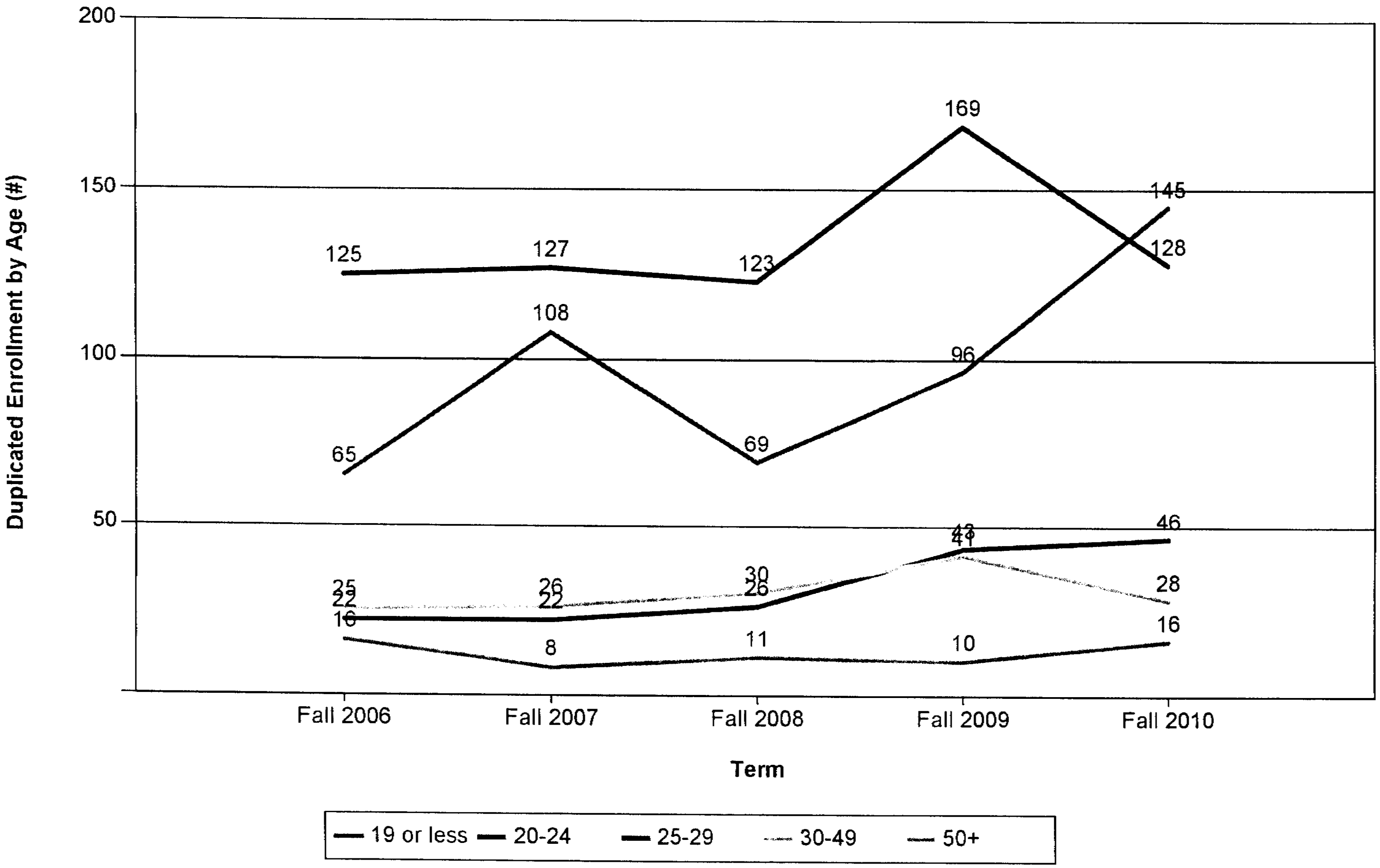
Enrollment by Age (Unduplicated Student Count)

Age	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
19 or less	57	26.0 %	95	37.1 %	66	28.0 %	92	28.1 %	139	40.2 %
20-24	110	50.2 %	112	43.8 %	114	48.3 %	153	46.8 %	125	36.1 %
25-29	19	8.7 %	18	7.0 %	25	10.6 %	36	11.0 %	43	12.4 %
30-49	21	9.6 %	23	9.0 %	22	9.3 %	36	11.0 %	25	7.2 %
50+	12	5.5 %	8	3.1 %	9	3.8 %	10	3.1 %	14	4.0 %
Total	219	100.0 %	256	100.0 %	236	100.0 %	327	100.0 %	346	100.0 %

245

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Age (Duplicated Student Count)

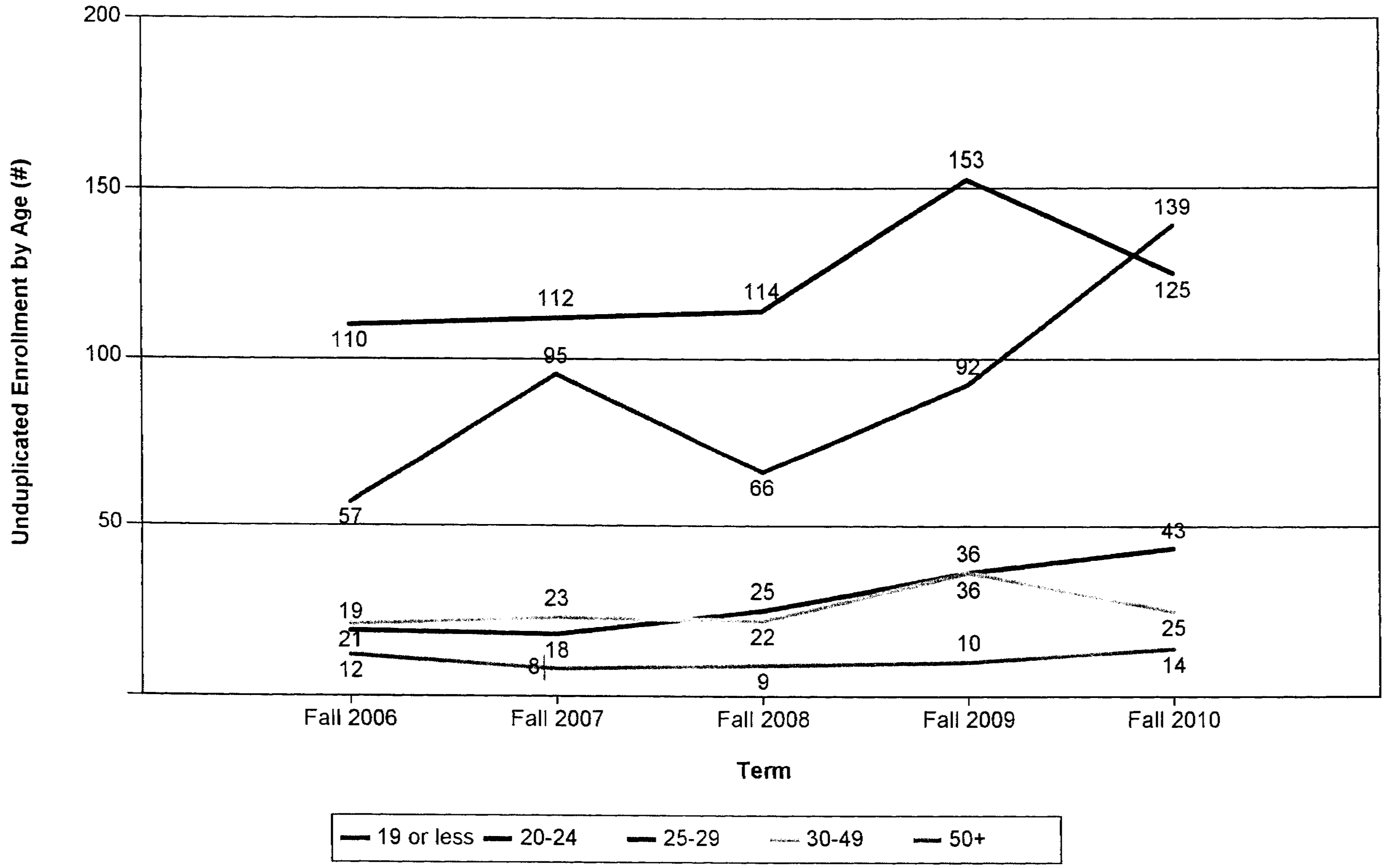


246

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Age (Unduplicated Student Count)



247

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	5	2.0 %	2	0.7 %	3	1.2 %	3	0.8 %		0.0 %
Asian	10	4.0 %	12	4.1 %	5	1.9 %	13	3.6 %	6	1.7 %
Black non-Hispanic	17	6.7 %	17	5.8 %	10	3.9 %	26	7.2 %	20	5.5 %
Filipino	5	2.0 %	7	2.4 %	6	2.3 %	12	3.3 %	21	5.8 %
Hispanic	38	15.0 %	59	20.3 %	53	20.5 %	62	17.3 %	101	27.8 %
Not Reported	22	8.7 %	32	11.0 %	25	9.7 %	18	5.0 %	22	6.1 %
Pacific Islander	3	1.2 %	5	1.7 %	8	3.1 %	4	1.1 %	5	1.4 %
Two or More	4	1.6 %	4	1.4 %	3	1.2 %	10	2.8 %	16	4.4 %
White non-Hispanic	149	58.9 %	153	52.6 %	146	56.4 %	211	58.8 %	172	47.4 %
Total	253	100.0 %	291	100.0 %	259	100.0 %	359	100.0 %	363	100.0 %

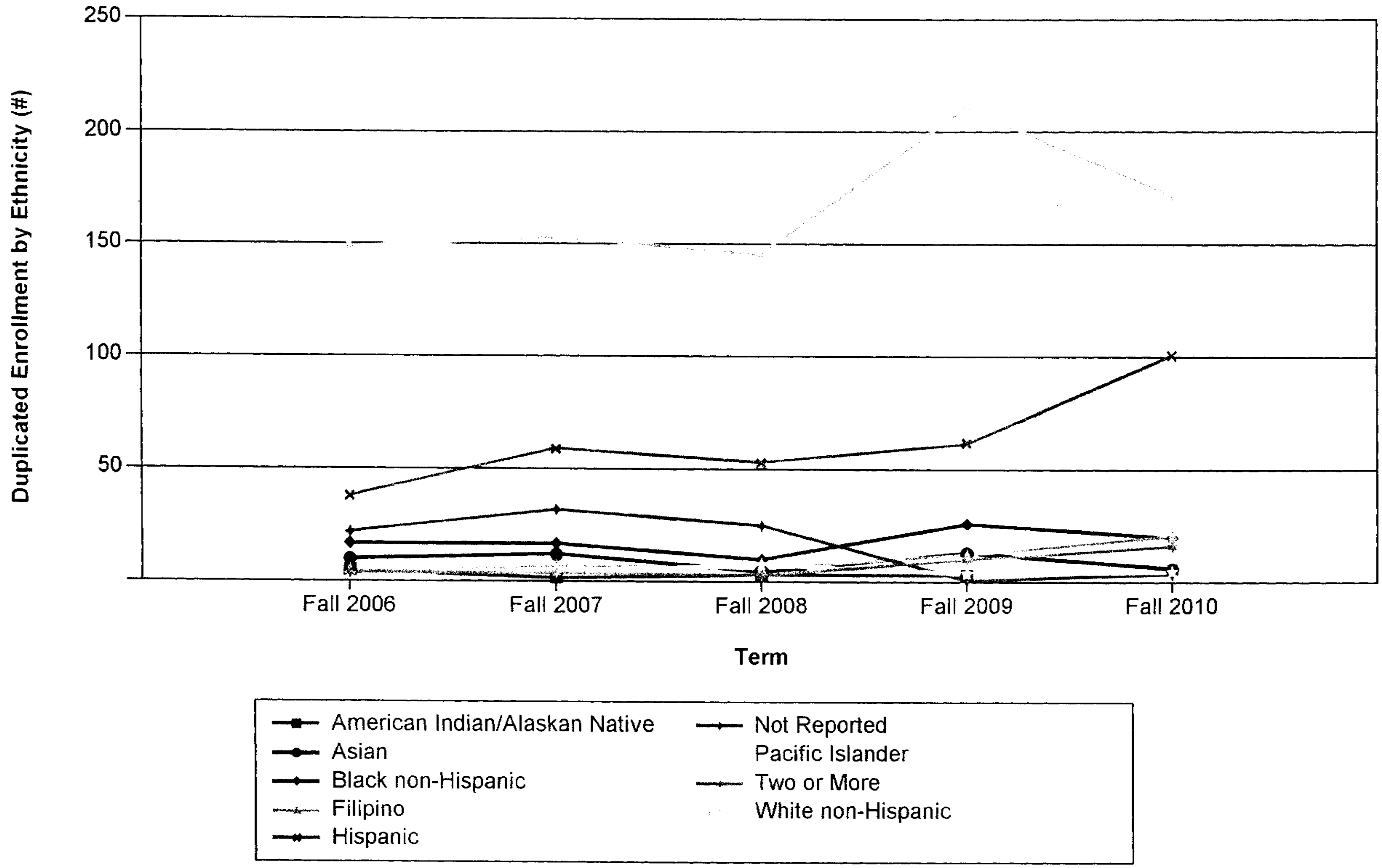
Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	5	2.3 %	2	0.8 %	2	0.8 %	3	0.9 %		0.0 %
Asian	8	3.7 %	11	4.3 %	5	2.1 %	12	3.7 %	6	1.7 %
Black non-Hispanic	14	6.4 %	16	6.2 %	9	3.8 %	24	7.3 %	20	5.8 %
Filipino	5	2.3 %	7	2.7 %	6	2.5 %	11	3.4 %	21	6.1 %
Hispanic	35	16.0 %	50	19.5 %	50	21.2 %	57	17.4 %	95	27.5 %
Not Reported	19	8.7 %	26	10.2 %	22	9.3 %	16	4.9 %	17	4.9 %
Pacific Islander	3	1.4 %	4	1.6 %	8	3.4 %	4	1.2 %	5	1.4 %
Two or More	3	1.4 %	4	1.6 %	2	0.8 %	7	2.1 %	16	4.6 %
White non-Hispanic	127	58.0 %	136	53.1 %	132	55.9 %	193	59.0 %	166	48.0 %
Total	219	100.0 %	256	100.0 %	236	100.0 %	327	100.0 %	346	100.0 %

248

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

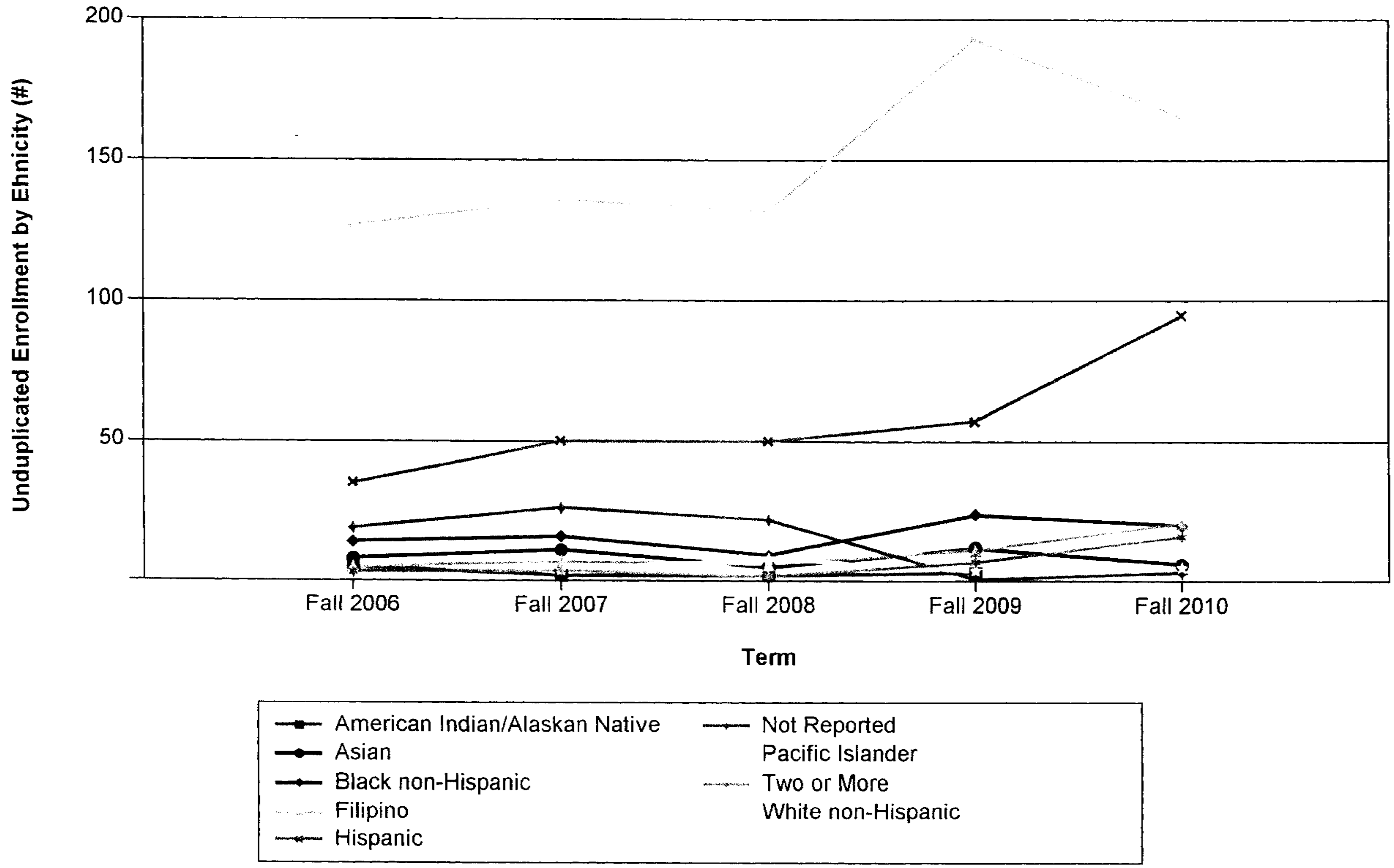
Enrollment by Ethnicity (Duplicated Student Count)



249

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount

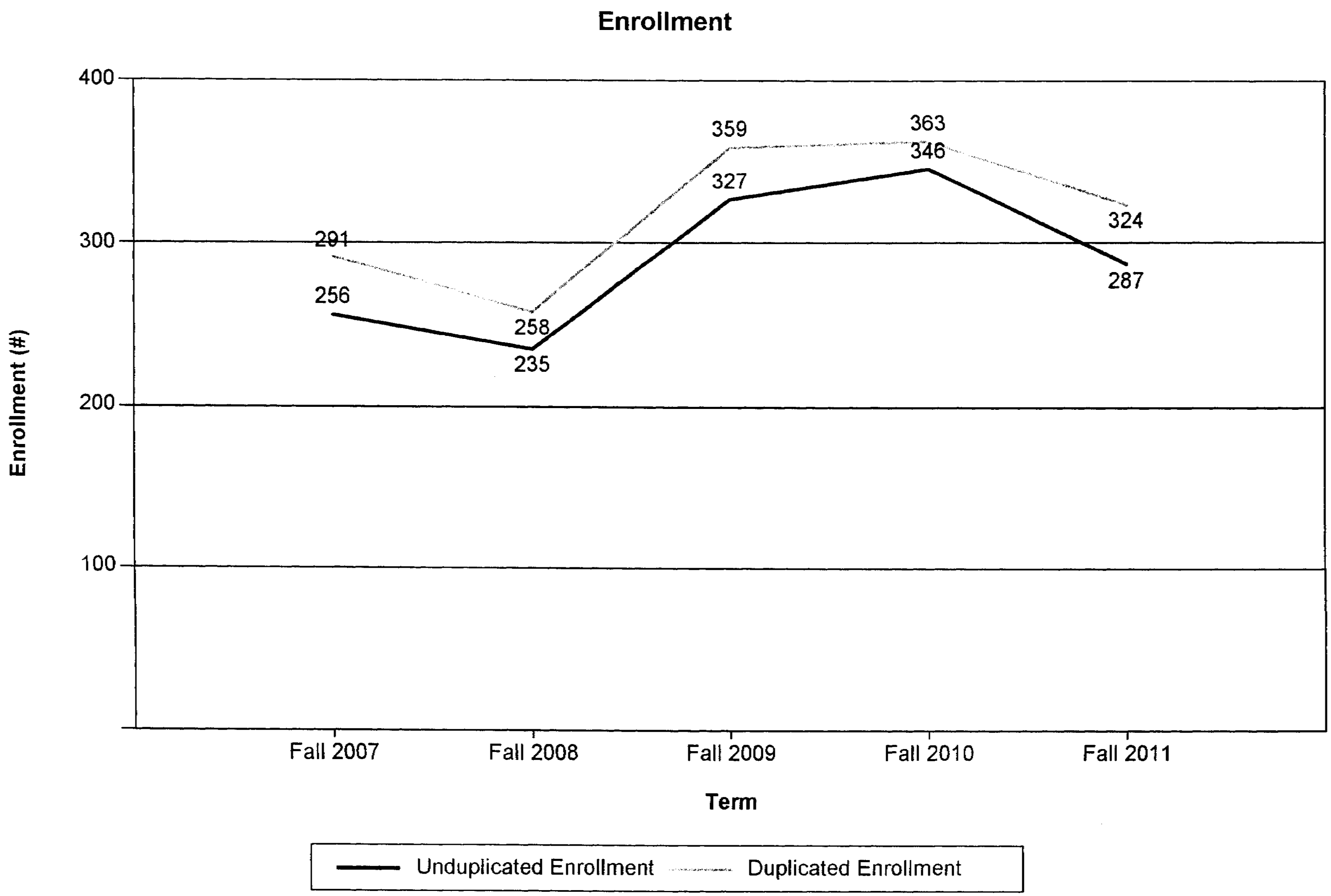
Enrollment by Ethnicity (Unduplicated Student Count)



250

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL



251

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Gender (Duplicated Student Count)

Gender	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
Female	161	55.3 %	148	57.4 %	196	54.6 %	197	54.3 %	146	45.1 %
Male	127	43.6 %	109	42.2 %	160	44.6 %	165	45.5 %	177	54.6 %
Not Reported	3	1.0 %	1	0.4 %	3	0.8 %	1	0.3 %	1	0.3 %
Total	291	100.0 %	258	100.0 %	359	100.0 %	363	100.0 %	324	100.0 %

Enrollment by Gender (Unduplicated Student Count)

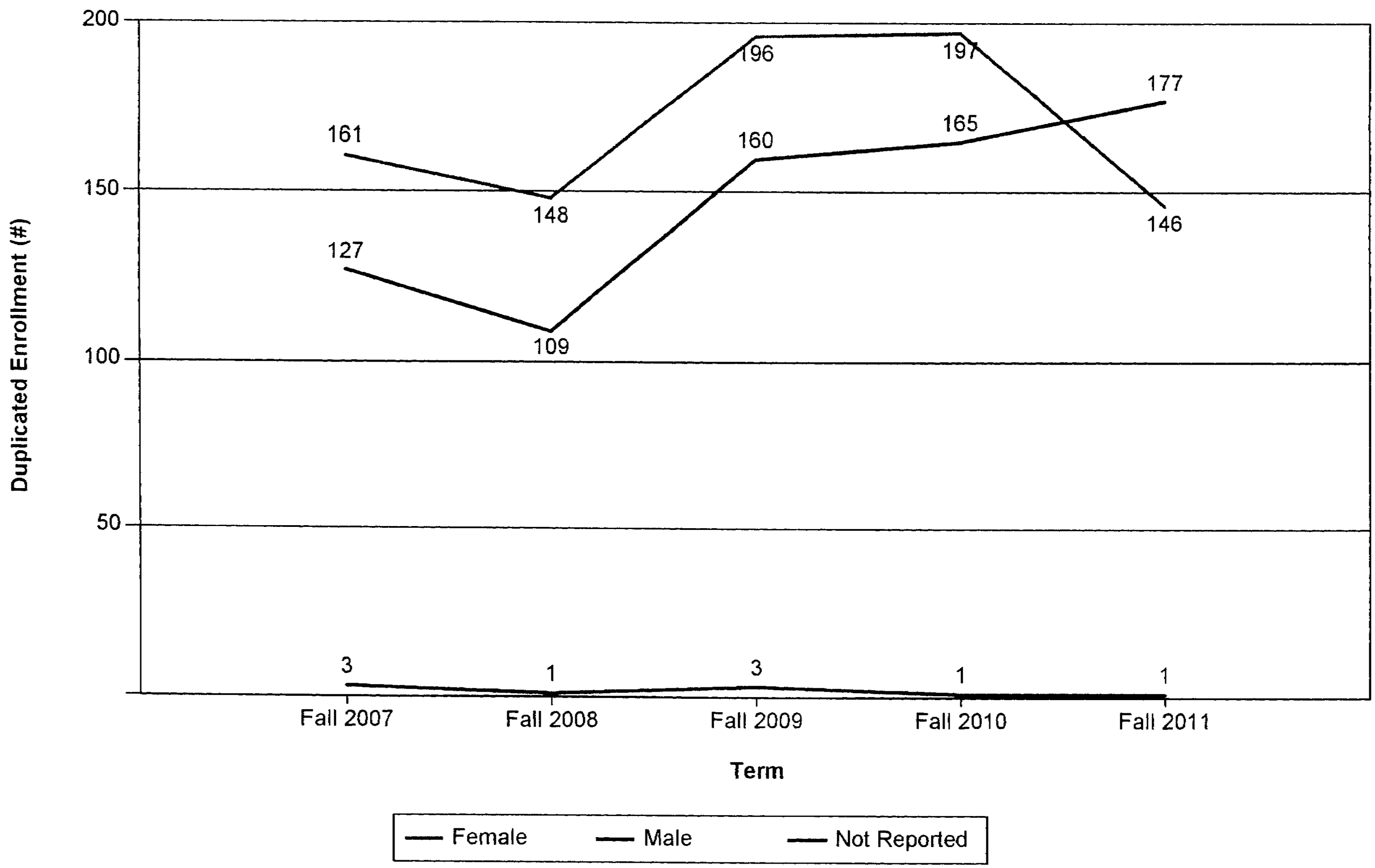
Gender	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
Female	140	54.7 %	139	59.1 %	182	55.7 %	188	54.3 %	129	44.9 %
Male	113	44.1 %	95	40.4 %	142	43.4 %	157	45.4 %	157	54.7 %
Not Reported	3	1.2 %	1	0.4 %	3	0.9 %	1	0.3 %	1	0.3 %
Total	256	100.0 %	235	100.0 %	327	100.0 %	346	100.0 %	287	100.0 %

252

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

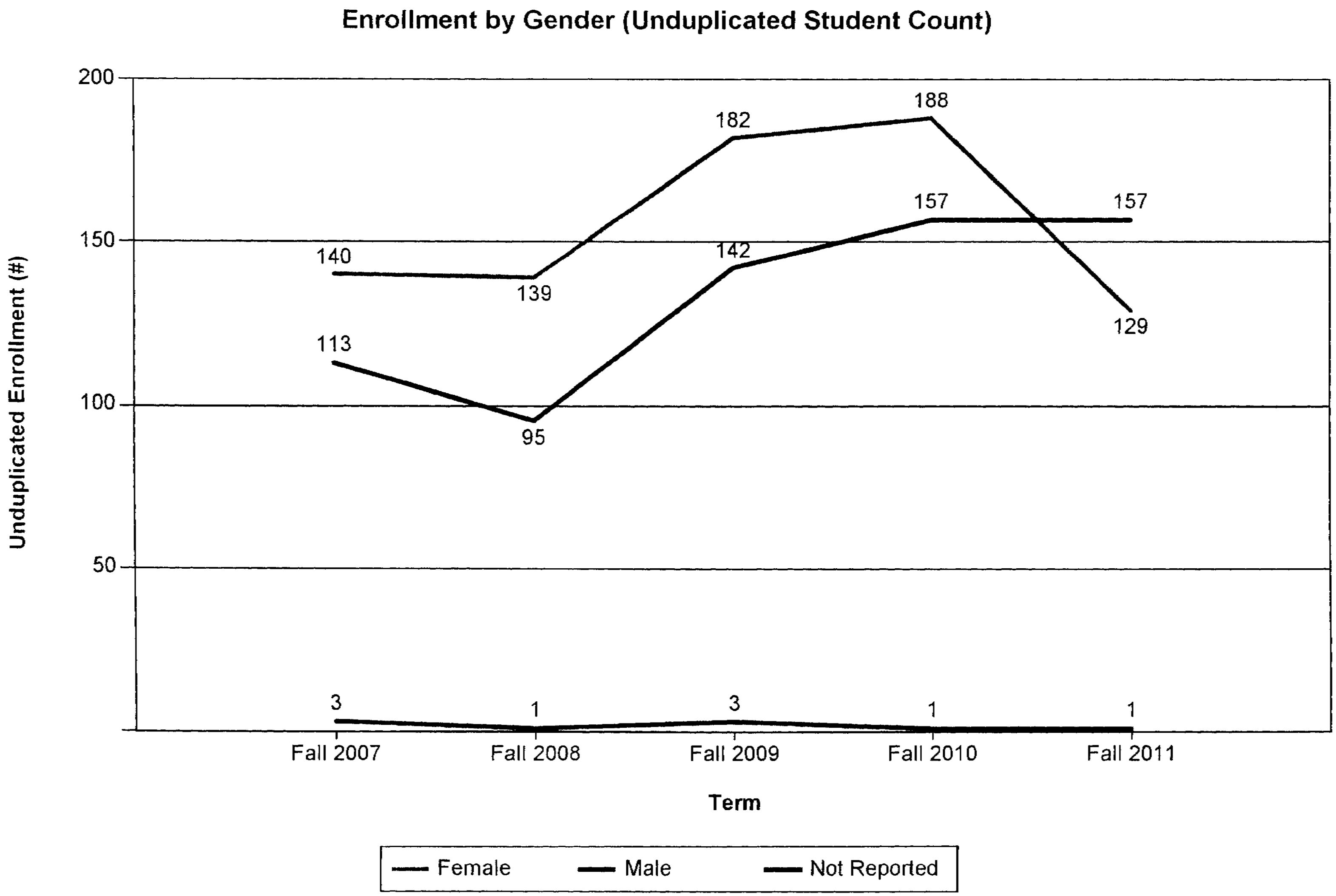
Enrollment by Gender (Duplicated Student Count)



253

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL



Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Age (Duplicated Student Counts)

Age	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	108	37.1 %	68	26.4 %	96	26.7 %	145	39.9 %	106	32.7 %
20-24	127	43.6 %	123	47.7 %	169	47.1 %	128	35.3 %	135	41.7 %
25-29	22	7.6 %	26	10.1 %	43	12.0 %	46	12.7 %	30	9.3 %
30-49	26	8.9 %	30	11.6 %	41	11.4 %	28	7.7 %	48	14.8 %
50+	8	2.7 %	11	4.3 %	10	2.8 %	16	4.4 %	5	1.5 %
Total	291	100.0 %	258	100.0 %	359	100.0 %	363	100.0 %	324	100.0 %

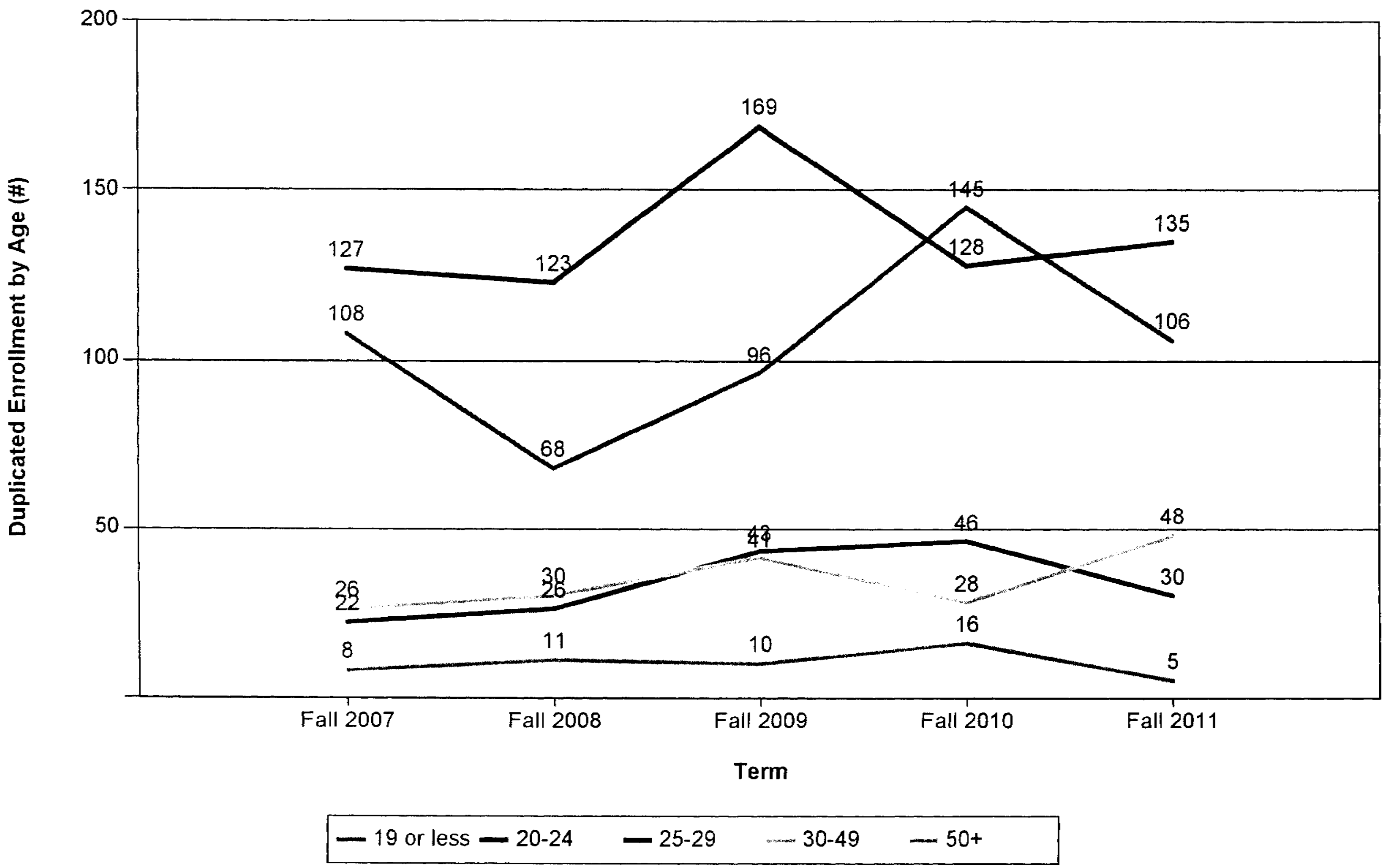
Enrollment by Age (Unduplicated Student Count)

Age	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	95	37.1 %	65	27.7 %	92	28.1 %	139	40.2 %	94	32.8 %
20-24	112	43.8 %	114	48.5 %	153	46.8 %	125	36.1 %	120	41.8 %
25-29	18	7.0 %	25	10.6 %	36	11.0 %	43	12.4 %	27	9.4 %
30-49	23	9.0 %	22	9.4 %	36	11.0 %	25	7.2 %	42	14.6 %
50+	8	3.1 %	9	3.8 %	10	3.1 %	14	4.0 %	4	1.4 %
Total	256	100.0 %	235	100.0 %	327	100.0 %	346	100.0 %	287	100.0 %

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

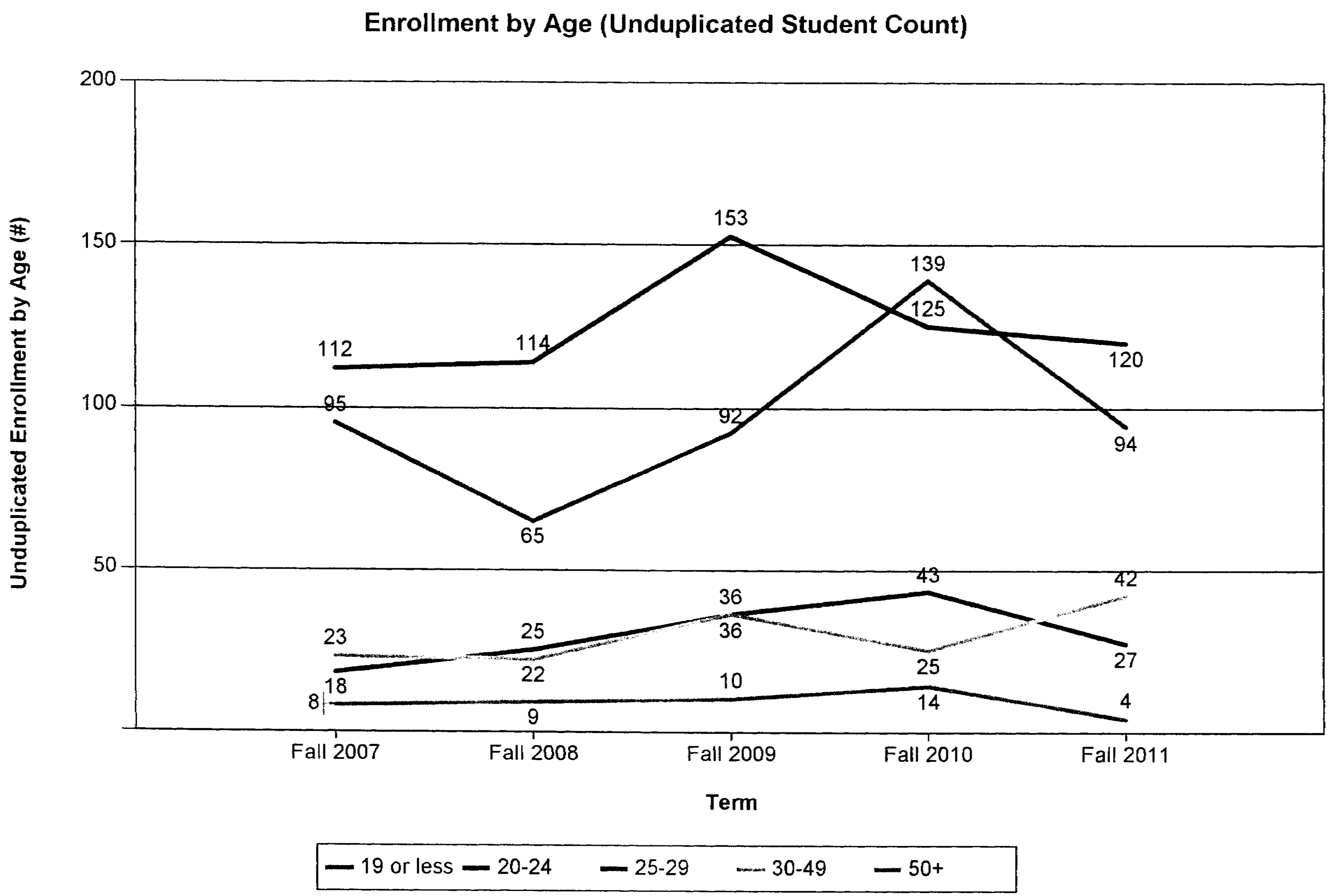
Enrollment by Age (Duplicated Student Count)



256

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL



257

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Ethnicity (Duplicated Student Counts)

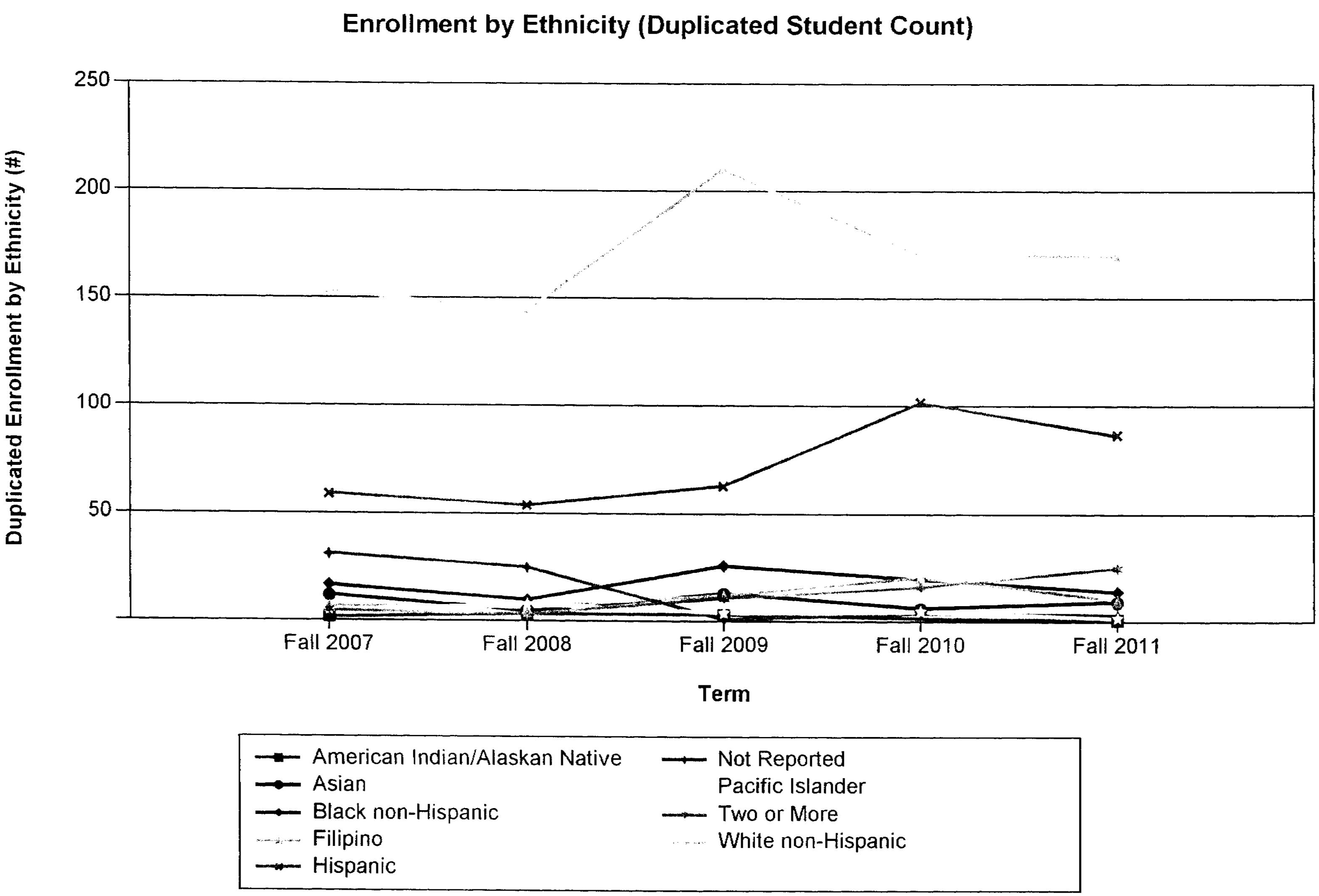
Ethnicity	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	2	0.7 %	3	1.2 %	3	0.8 %		0.0 %	1	0.3 %
Asian	12	4.1 %	5	1.9 %	13	3.6 %	6	1.7 %	9	2.8 %
Black non-Hispanic	17	5.8 %	10	3.9 %	26	7.2 %	20	5.5 %	14	4.3 %
Filipino	7	2.4 %	6	2.3 %	12	3.3 %	21	5.8 %	10	3.1 %
Hispanic	59	20.3 %	54	20.9 %	63	17.5 %	102	28.1 %	87	26.9 %
Not Reported	31	10.7 %	25	9.7 %	17	4.7 %	22	6.1 %	6	1.9 %
Pacific Islander	5	1.7 %	8	3.1 %	4	1.1 %	5	1.4 %	2	0.6 %
Two or More	5	1.7 %	3	1.2 %	11	3.1 %	16	4.4 %	25	7.7 %
White non-Hispanic	153	52.6 %	144	55.8 %	210	58.5 %	171	47.1 %	170	52.5 %
Total	291	100.0 %	258	100.0 %	359	100.0 %	363	100.0 %	324	100.0 %

Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	2	0.8 %	2	0.9 %	3	0.9 %		0.0 %	1	0.3 %
Asian	11	4.3 %	5	2.1 %	12	3.7 %	6	1.7 %	9	3.1 %
Black non-Hispanic	16	6.2 %	9	3.8 %	24	7.3 %	20	5.8 %	14	4.9 %
Filipino	7	2.7 %	6	2.6 %	11	3.4 %	21	6.1 %	9	3.1 %
Hispanic	50	19.5 %	51	21.7 %	58	17.7 %	96	27.7 %	79	27.5 %
Not Reported	25	9.8 %	22	9.4 %	15	4.6 %	17	4.9 %	6	2.1 %
Pacific Islander	4	1.6 %	8	3.4 %	4	1.2 %	5	1.4 %	2	0.7 %
Two or More	5	2.0 %	2	0.9 %	8	2.4 %	16	4.6 %	23	8.0 %
White non-Hispanic	136	53.1 %	130	55.3 %	192	58.7 %	165	47.7 %	144	50.2 %
Total	256	100.0 %	235	100.0 %	327	100.0 %	346	100.0 %	287	100.0 %

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount

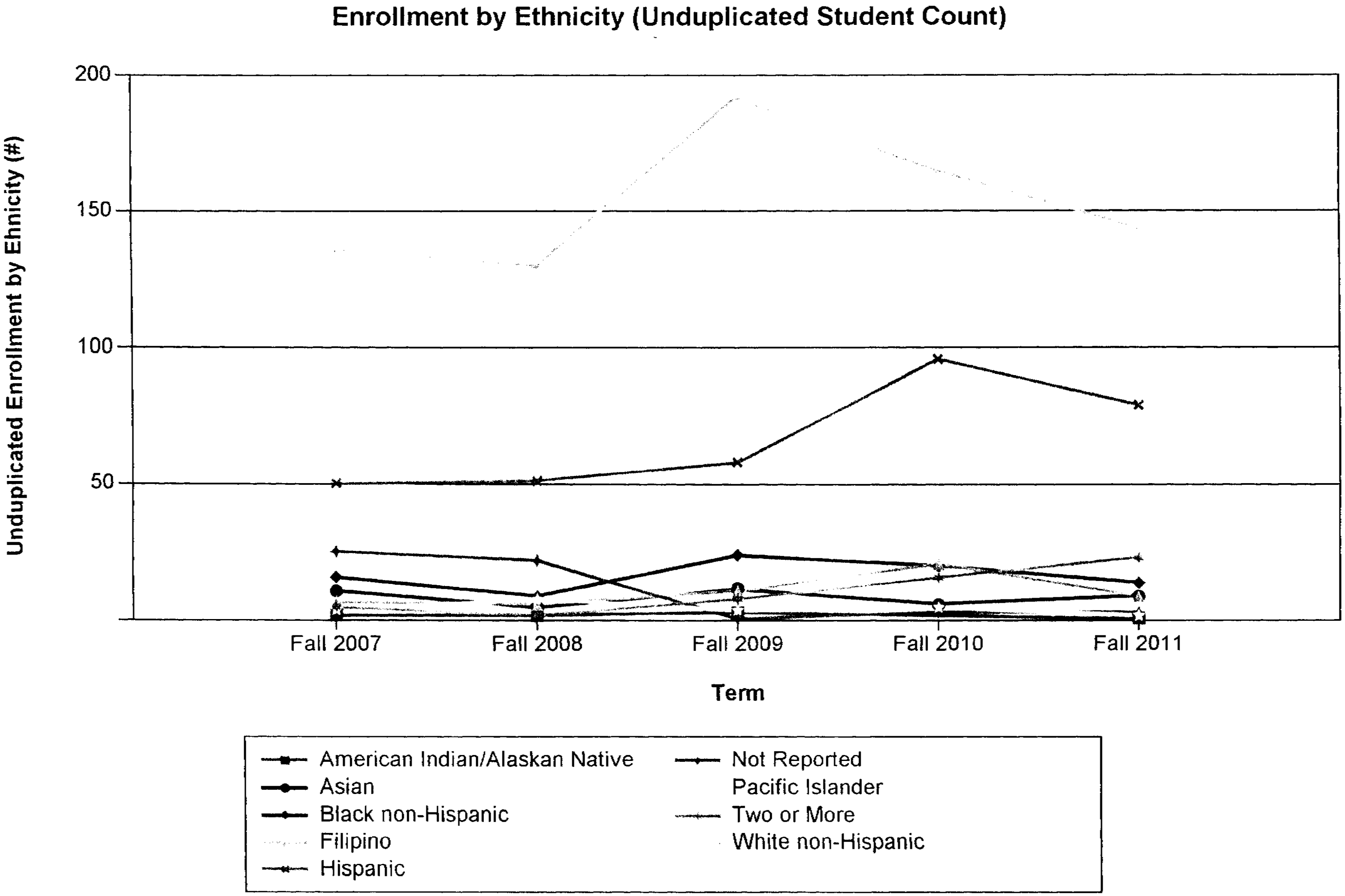
Grossmont College Enrollment
GEOL



259

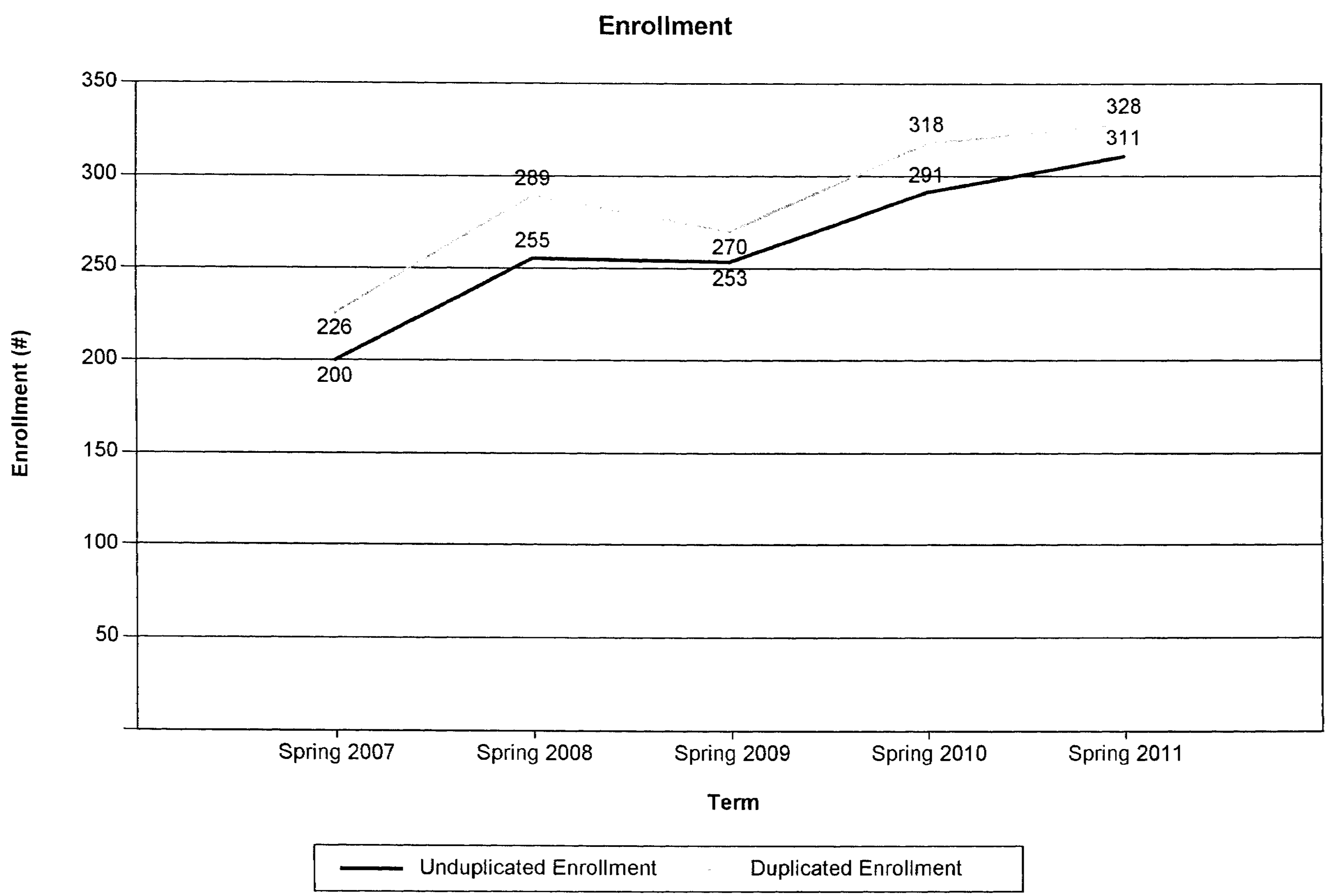
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL



260

Grossmont College Enrollment
GEOL



261

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Gender (Duplicated Student Count)

Gender	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
Female	119	52.7 %	140	48.4 %	147	54.4 %	143	45.0 %	170	51.8 %
Male	106	46.9 %	146	50.5 %	120	44.4 %	169	53.1 %	156	47.6 %
Not Reported	1	0.4 %	3	1.0 %	3	1.1 %	6	1.9 %	2	0.6 %
Total	226	100.0 %	289	100.0 %	270	100.0 %	318	100.0 %	328	100.0 %

Enrollment by Gender (Unduplicated Student Count)

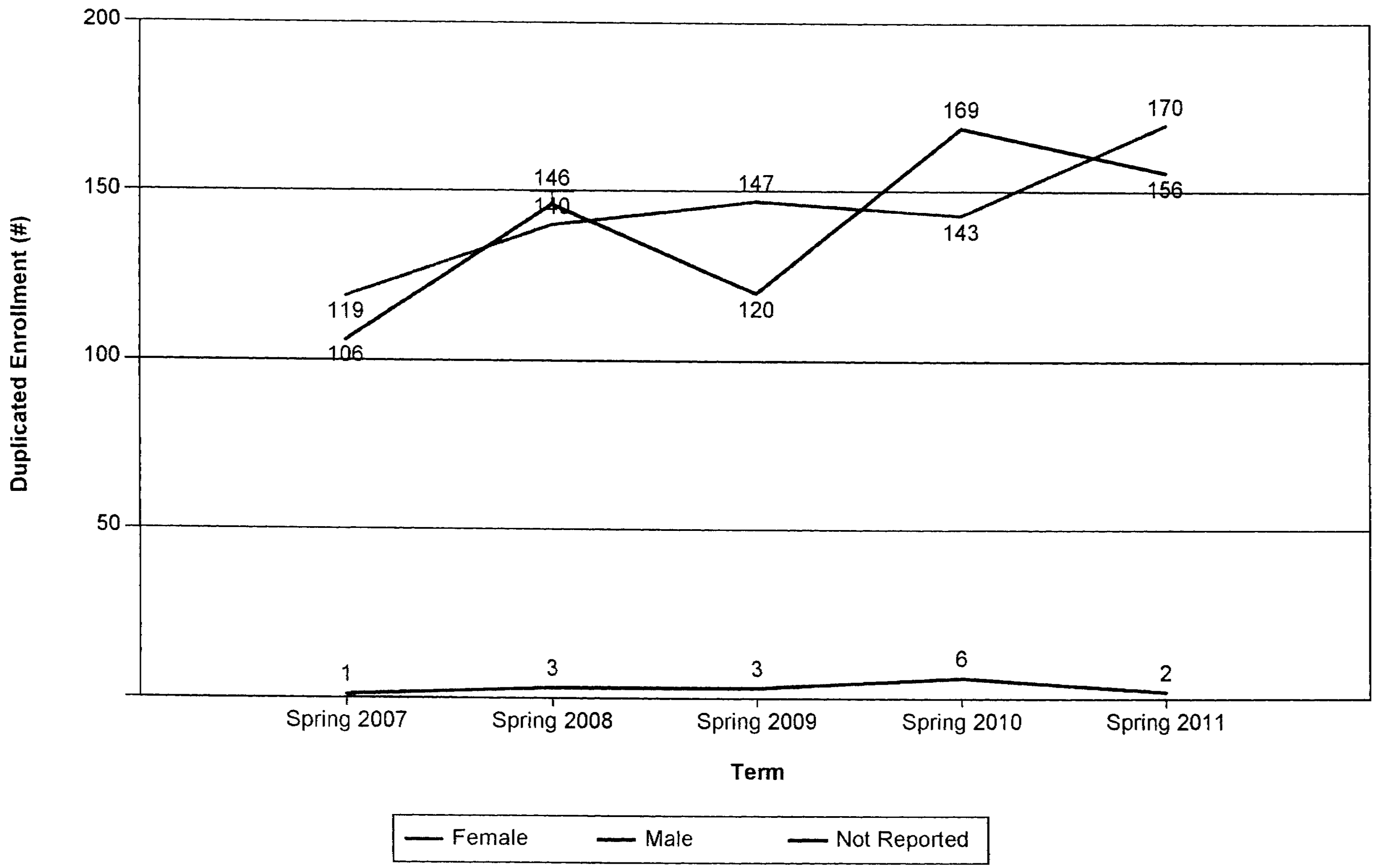
Gender	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
Female	109	54.5 %	127	49.8 %	140	55.3 %	136	46.7 %	160	51.4 %
Male	90	45.0 %	125	49.0 %	110	43.5 %	151	51.9 %	149	47.9 %
Not Reported	1	0.5 %	3	1.2 %	3	1.2 %	4	1.4 %	2	0.6 %
Total	200	100.0 %	255	100.0 %	253	100.0 %	291	100.0 %	311	100.0 %

262

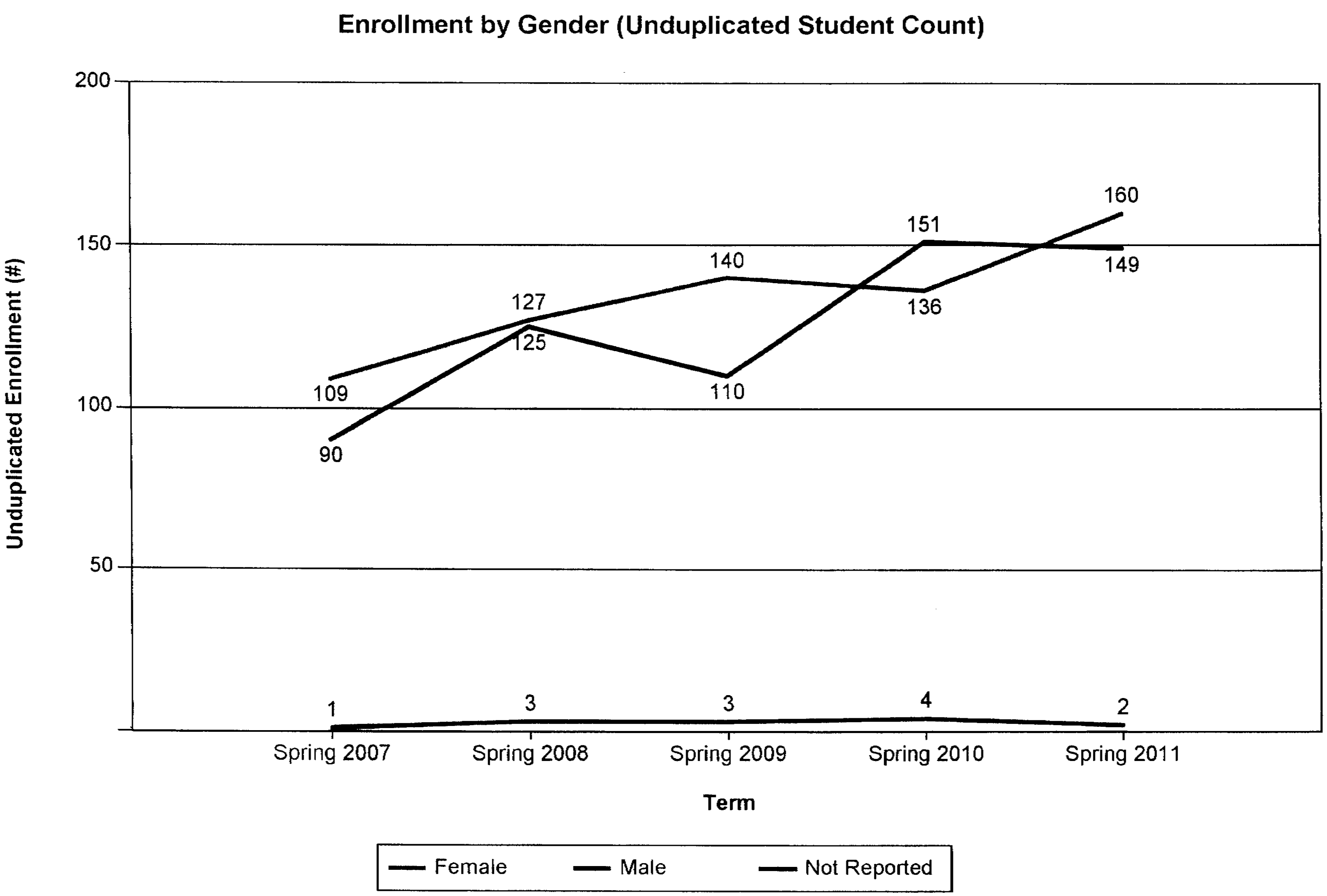
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount

Grossmont College Enrollment
GEOL

Enrollment by Gender (Duplicated Student Count)



Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.



264

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Age (Duplicated Student Counts)

Age	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	75	33.2 %	100	34.6 %	72	26.7 %	89	28.0 %	68	20.7 %
20-24	95	42.0 %	122	42.2 %	112	41.5 %	139	43.7 %	165	50.3 %
25-29	28	12.4 %	36	12.5 %	37	13.7 %	46	14.5 %	46	14.0 %
30-49	23	10.2 %	27	9.3 %	44	16.3 %	36	11.3 %	43	13.1 %
50+	5	2.2 %	4	1.4 %	5	1.9 %	8	2.5 %	6	1.8 %
Total	226	100.0 %	289	100.0 %	270	100.0 %	318	100.0 %	328	100.0 %

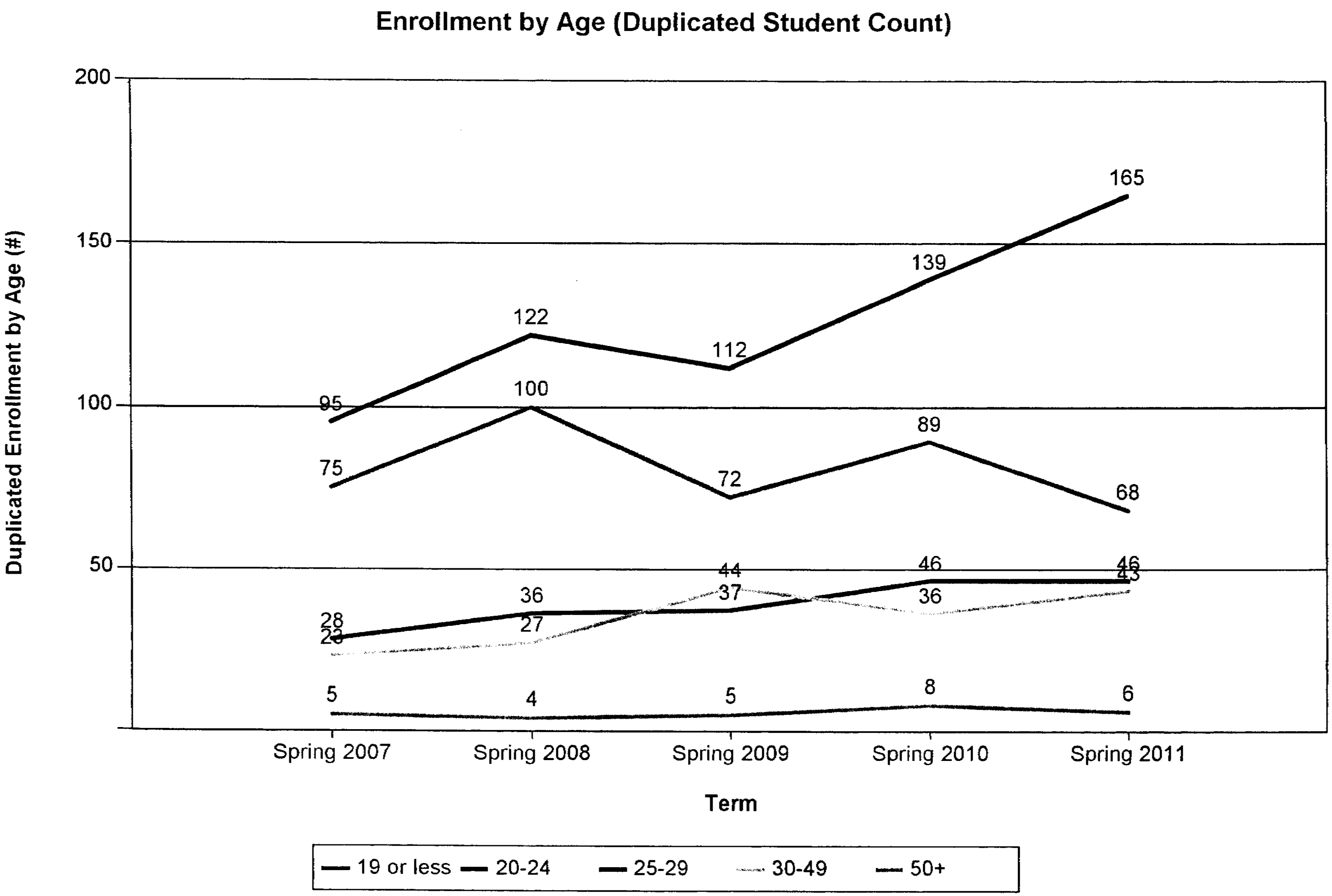
Enrollment by Age (Unduplicated Student Count)

Age	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	66	33.0 %	89	34.9 %	68	26.9 %	82	28.2 %	67	21.5 %
20-24	86	43.0 %	110	43.1 %	108	42.7 %	132	45.4 %	155	49.8 %
25-29	23	11.5 %	30	11.8 %	33	13.0 %	39	13.4 %	43	13.8 %
30-49	21	10.5 %	22	8.6 %	39	15.4 %	30	10.3 %	40	12.9 %
50+	4	2.0 %	4	1.6 %	5	2.0 %	8	2.7 %	6	1.9 %
Total	200	100.0 %	255	100.0 %	253	100.0 %	291	100.0 %	311	100.0 %

265

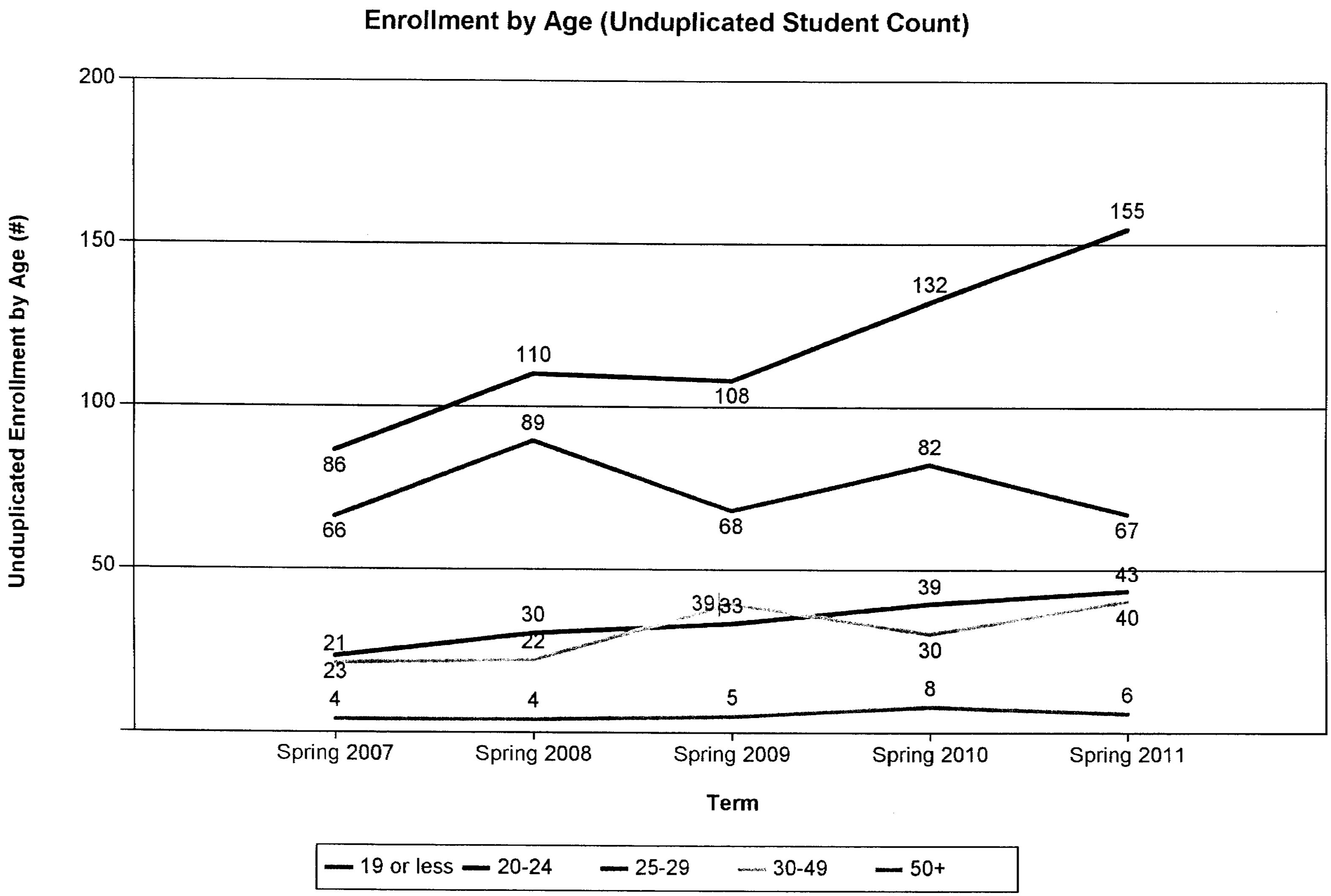
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL



266

Grossmont College Enrollment
GEOL



267

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	2	0.9 %	4	1.4 %	6	2.2 %	5	1.6 %	4	1.2 %
Asian	9	4.0 %	17	5.9 %	12	4.4 %	14	4.4 %	16	4.9 %
Black non-Hispanic	8	3.5 %	14	4.8 %	17	6.3 %	16	5.0 %	29	8.8 %
Filipino	7	3.1 %	10	3.5 %	7	2.6 %	8	2.5 %	16	4.9 %
Hispanic	42	18.6 %	48	16.6 %	48	17.8 %	60	18.9 %	69	21.0 %
Not Reported	27	11.9 %	25	8.7 %	22	8.1 %	24	7.5 %	17	5.2 %
Pacific Islander		0.0 %	5	1.7 %	3	1.1 %	3	0.9 %	1	0.3 %
Two or More	5	2.2 %	4	1.4 %	7	2.6 %	10	3.1 %	20	6.1 %
White non-Hispanic	126	55.8 %	162	56.1 %	148	54.8 %	178	56.0 %	156	47.6 %
Total	226	100.0 %	289	100.0 %	270	100.0 %	318	100.0 %	328	100.0 %

Enrollment by Ethnicity (Unduplicated Student Counts)

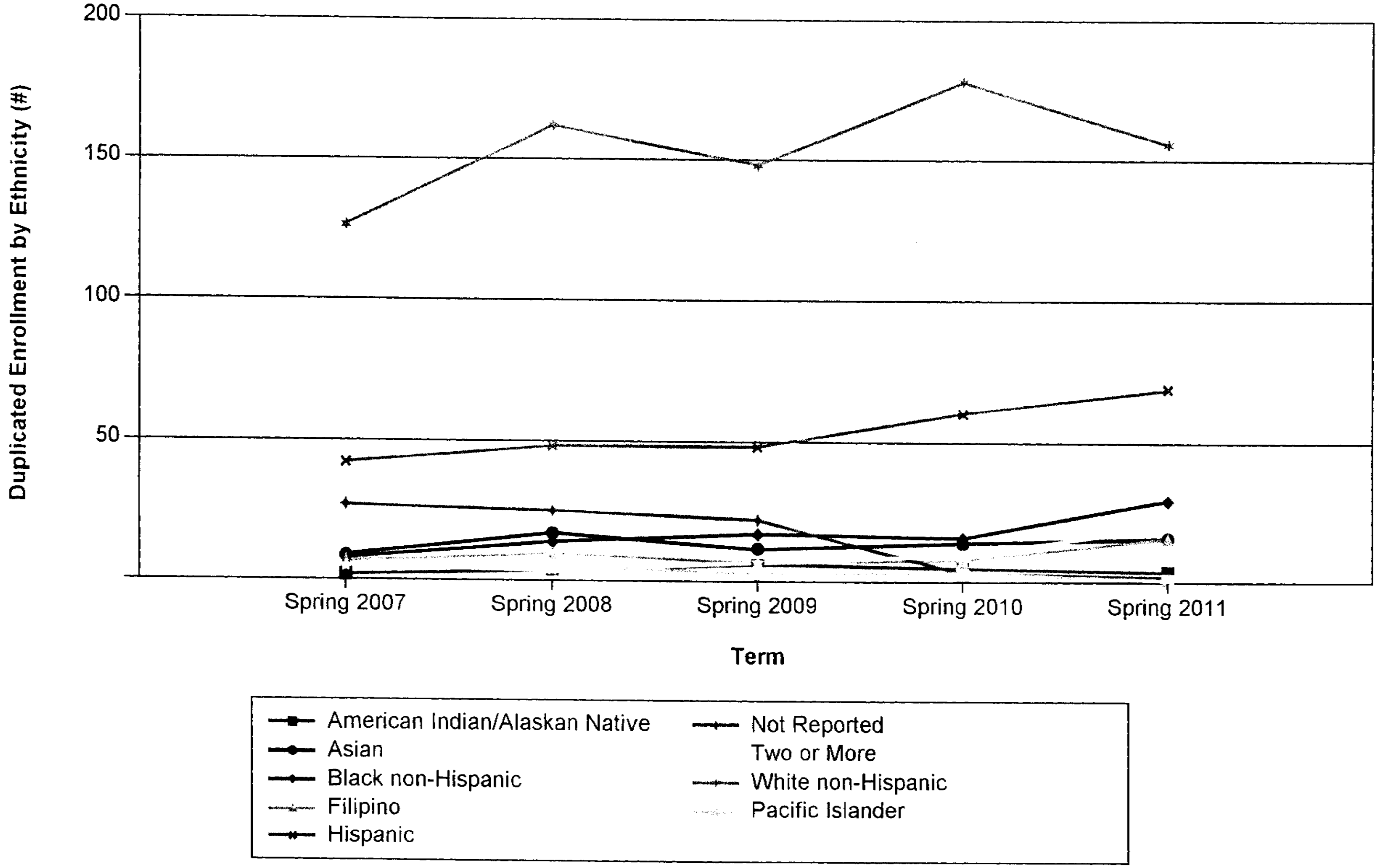
Ethnicity	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	2	1.0 %	3	1.2 %	6	2.4 %	4	1.4 %	4	1.3 %
Asian	7	3.5 %	12	4.7 %	11	4.3 %	14	4.8 %	13	4.2 %
Black non-Hispanic	6	3.0 %	14	5.5 %	14	5.5 %	15	5.2 %	29	9.3 %
Filipino	6	3.0 %	10	3.9 %	6	2.4 %	8	2.7 %	15	4.8 %
Hispanic	38	19.0 %	43	16.9 %	46	18.2 %	55	18.9 %	66	21.2 %
Not Reported	25	12.5 %	23	9.0 %	22	8.7 %	19	6.5 %	16	5.1 %
Pacific Islander		0.0 %	5	2.0 %	3	1.2 %	2	0.7 %	1	0.3 %
Two or More	5	2.5 %	3	1.2 %	6	2.4 %	10	3.4 %	20	6.4 %
White non-Hispanic	111	55.5 %	142	55.7 %	139	54.9 %	164	56.4 %	147	47.3 %
Total	200	100.0 %	255	100.0 %	253	100.0 %	291	100.0 %	311	100.0 %

268

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

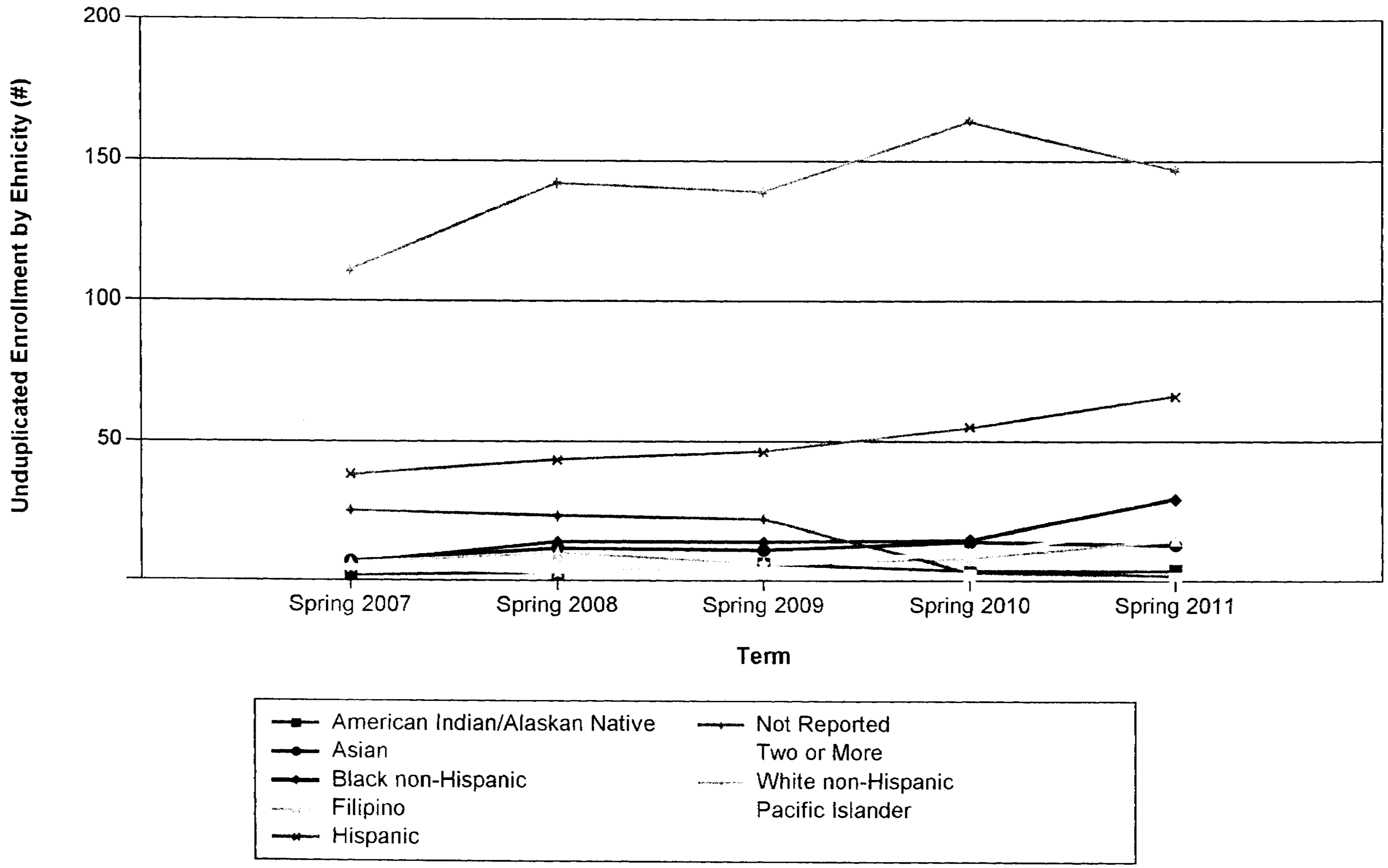
Enrollment by Ethnicity (Duplicated Student Count)



269

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

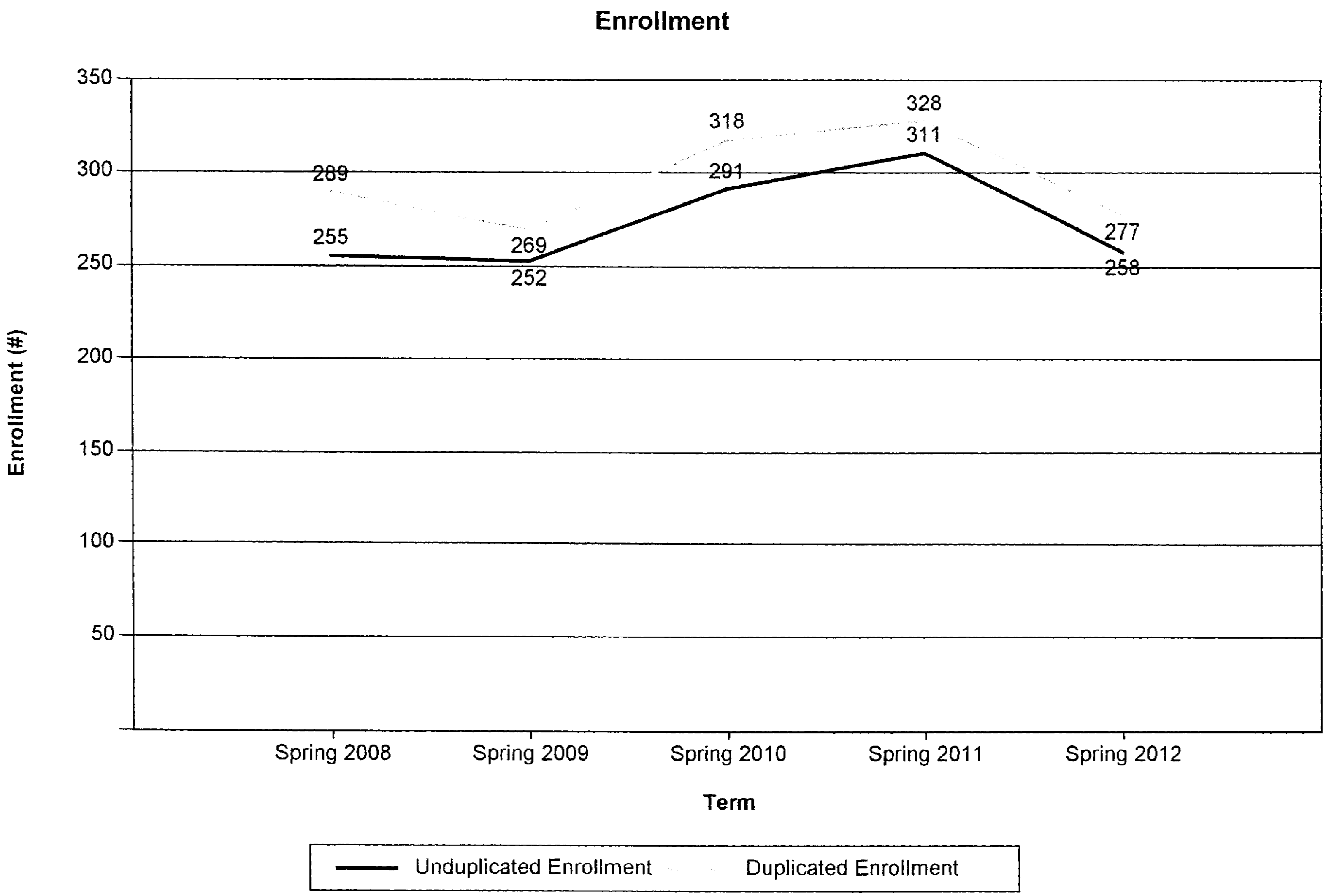
Enrollment by Ethnicity (Unduplicated Student Count)



270

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount

Grossmont College Enrollment
GEOL



271

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Gender (Duplicated Student Count)

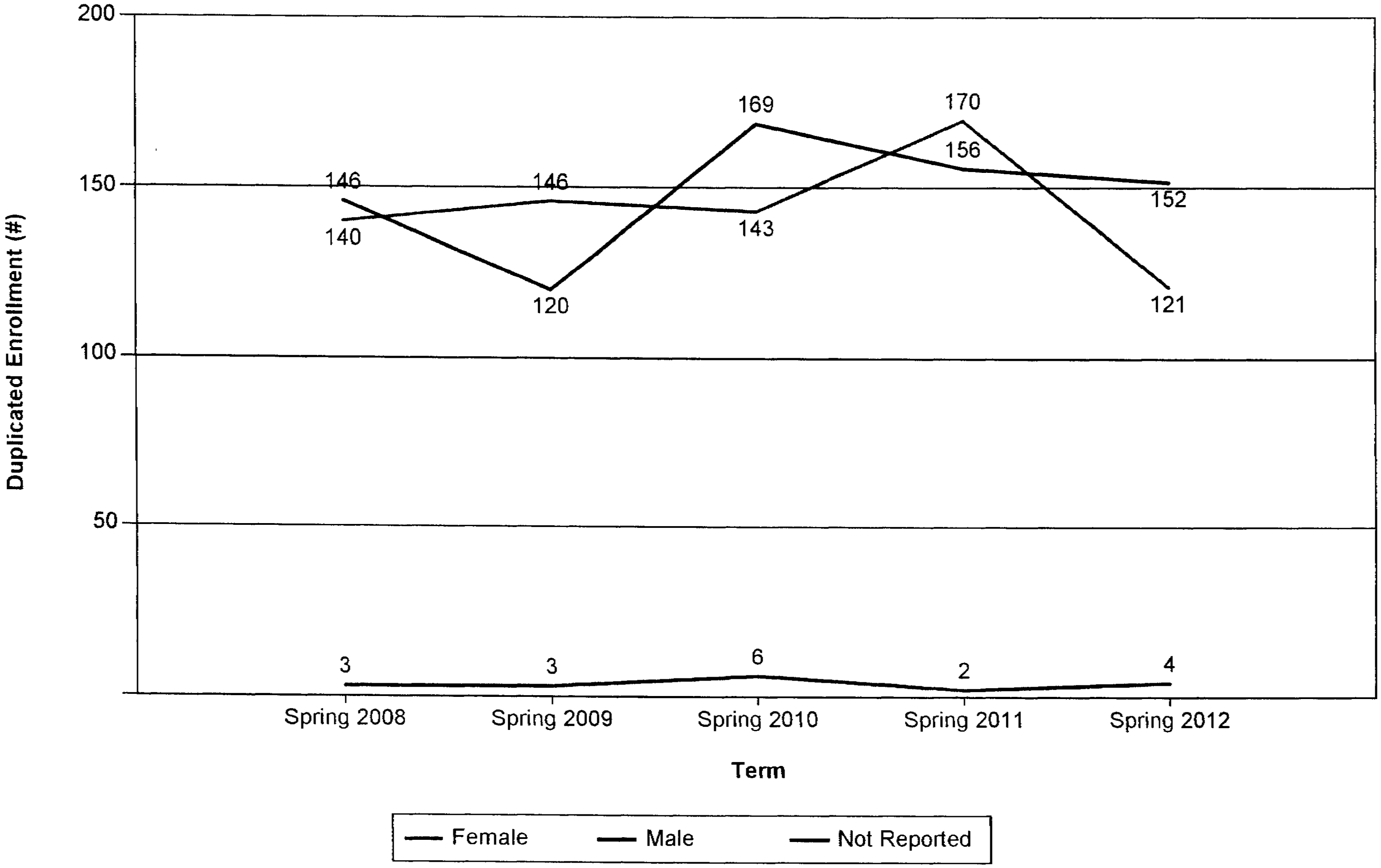
Gender	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
Female	140	48.4 %	146	54.3 %	143	45.0 %	170	51.8 %	121	43.7 %
Male	146	50.5 %	120	44.6 %	169	53.1 %	156	47.6 %	152	54.9 %
Not Reported	3	1.0 %	3	1.1 %	6	1.9 %	2	0.6 %	4	1.4 %
Total	289	100.0 %	269	100.0 %	318	100.0 %	328	100.0 %	277	100.0 %

Enrollment by Gender (Unduplicated Student Count)

Gender	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
Female	127	49.8 %	139	55.2 %	136	46.7 %	160	51.4 %	112	43.4 %
Male	125	49.0 %	110	43.7 %	151	51.9 %	149	47.9 %	143	55.4 %
Not Reported	3	1.2 %	3	1.2 %	4	1.4 %	2	0.6 %	3	1.2 %
Total	255	100.0 %	252	100.0 %	291	100.0 %	311	100.0 %	258	100.0 %

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

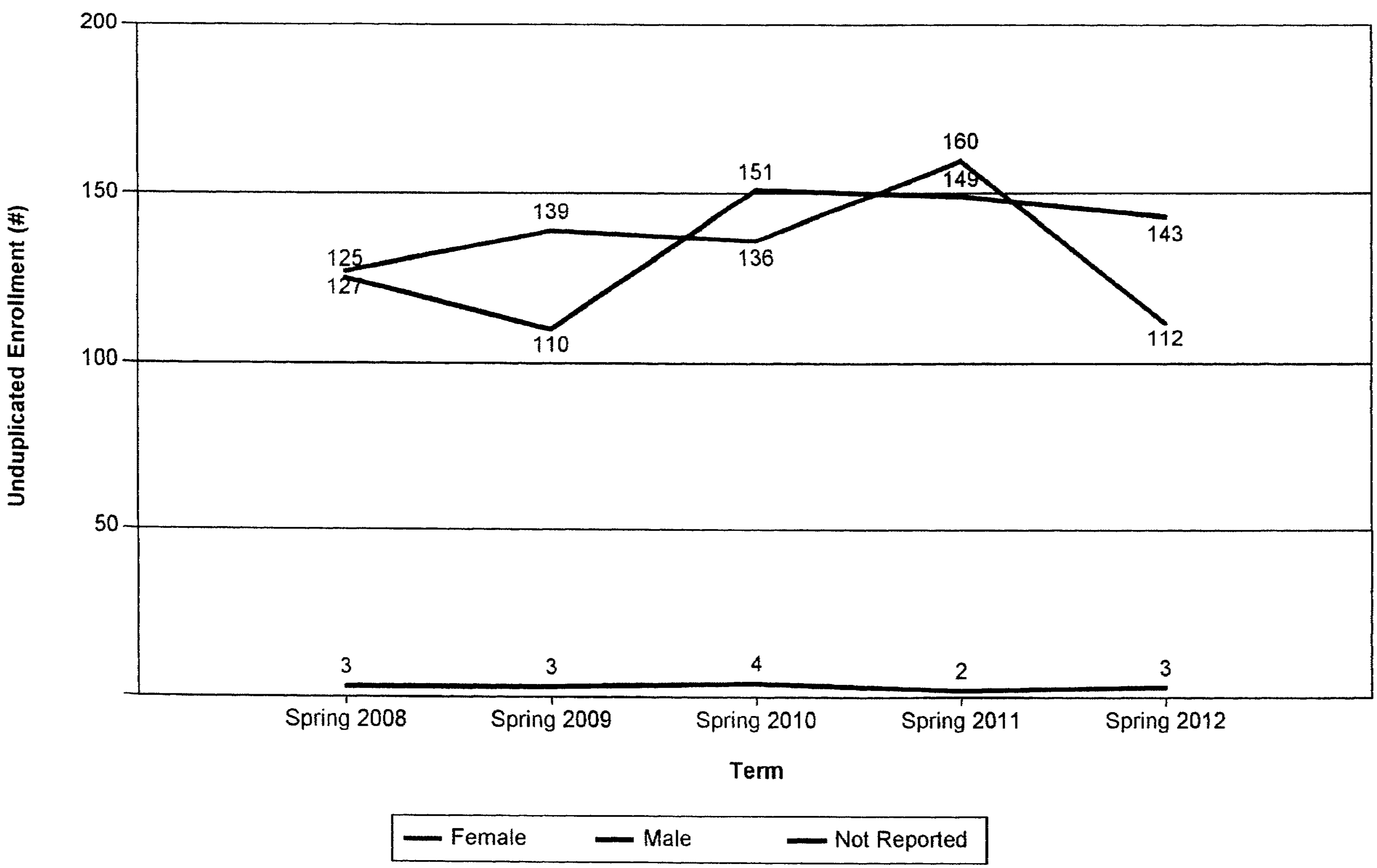
Enrollment by Gender (Duplicated Student Count)



273

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Gender (Unduplicated Student Count)



274

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Age (Duplicated Student Counts)

Age	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
19 or less	100	34.6 %	72	26.8 %	89	28.0 %	68	20.7 %	83	30.0 %
20-24	122	42.2 %	111	41.3 %	139	43.7 %	165	50.3 %	123	44.4 %
25-29	36	12.5 %	37	13.8 %	46	14.5 %	46	14.0 %	33	11.9 %
30-49	27	9.3 %	44	16.4 %	36	11.3 %	43	13.1 %	33	11.9 %
50+	4	1.4 %	5	1.9 %	8	2.5 %	6	1.8 %	5	1.8 %
Total	289	100.0 %	269	100.0 %	318	100.0 %	328	100.0 %	277	100.0 %

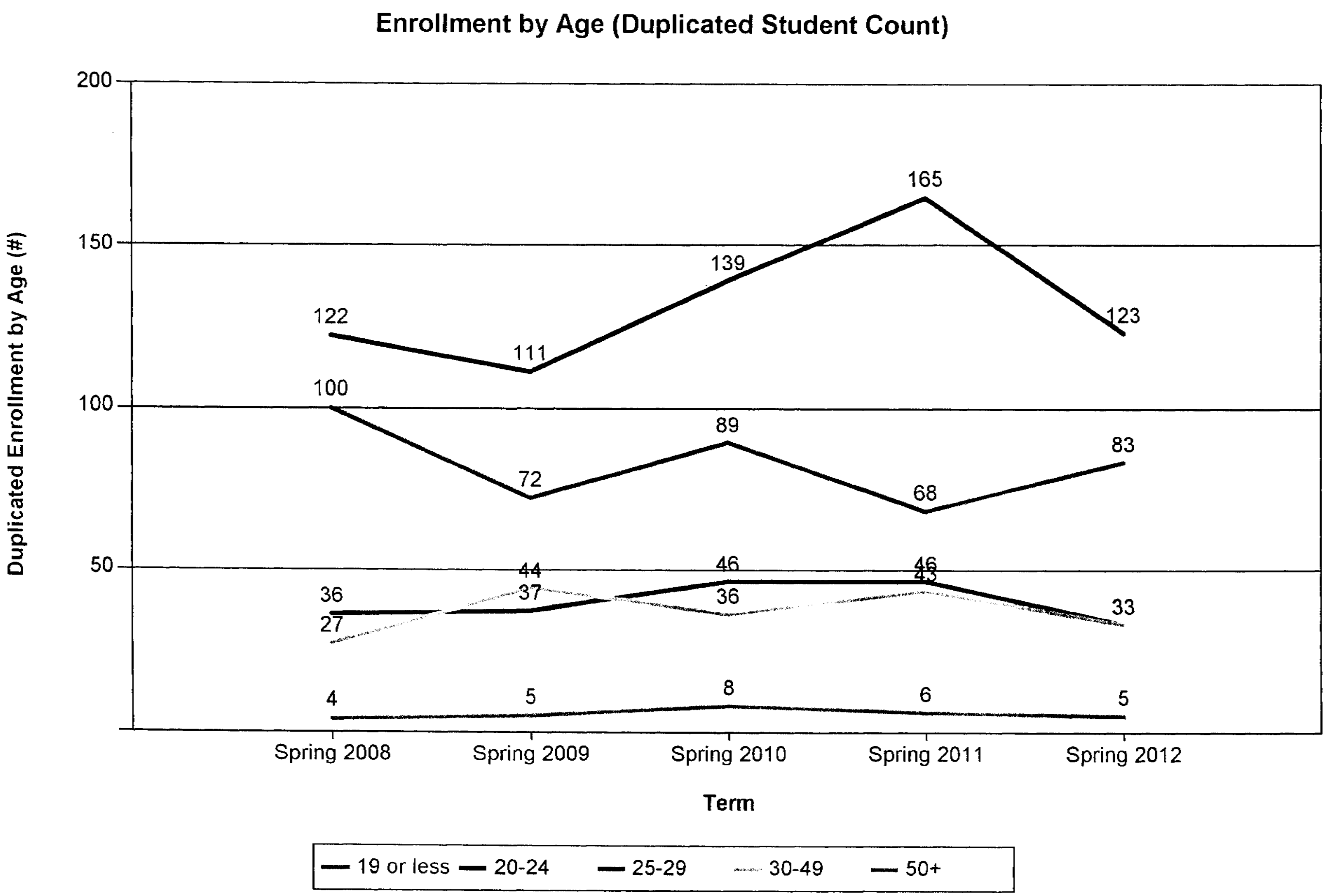
Enrollment by Age (Unduplicated Student Count)

Age	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
19 or less	89	34.9 %	68	27.0 %	82	28.2 %	67	21.5 %	80	31.0 %
20-24	110	43.1 %	107	42.5 %	132	45.4 %	155	49.8 %	116	45.0 %
25-29	30	11.8 %	33	13.1 %	39	13.4 %	43	13.8 %	29	11.2 %
30-49	22	8.6 %	39	15.5 %	30	10.3 %	40	12.9 %	28	10.9 %
50+	4	1.6 %	5	2.0 %	8	2.7 %	6	1.9 %	5	1.9 %
Total	255	100.0 %	252	100.0 %	291	100.0 %	311	100.0 %	258	100.0 %

275

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

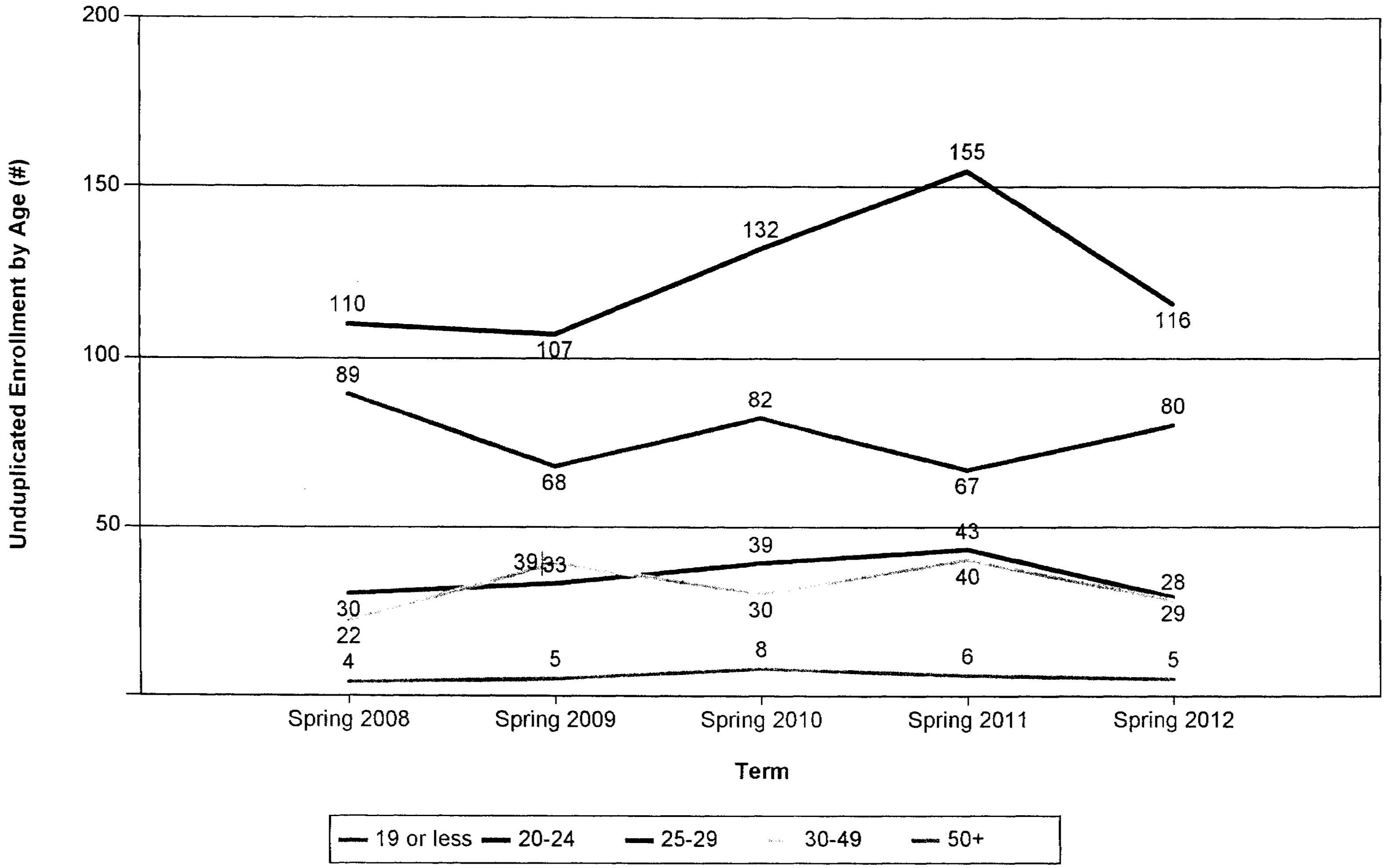
Grossmont College Enrollment
GEOL



276

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Age (Unduplicated Student Count)



277

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
GEOL

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	4	1.4 %	6	2.2 %	5	1.6 %	4	1.2 %	1	0.4 %
Asian	17	5.9 %	12	4.5 %	14	4.4 %	16	4.9 %	11	4.0 %
Black non-Hispanic	14	4.8 %	17	6.3 %	14	4.4 %	29	8.8 %	14	5.1 %
Filipino	10	3.5 %	7	2.6 %	8	2.5 %	16	4.9 %	11	4.0 %
Hispanic	48	16.6 %	48	17.8 %	62	19.5 %	69	21.0 %	76	27.4 %
Not Reported	24	8.3 %	21	7.8 %	24	7.5 %	17	5.2 %	7	2.5 %
Pacific Islander	5	1.7 %	3	1.1 %	3	0.9 %	1	0.3 %	1	0.4 %
Two or More	5	1.7 %	8	3.0 %	11	3.5 %	20	6.1 %	19	6.9 %
White non-Hispanic	162	56.1 %	147	54.6 %	177	55.7 %	156	47.6 %	137	49.5 %
Total	289	100.0 %	269	100.0 %	318	100.0 %	328	100.0 %	277	100.0 %

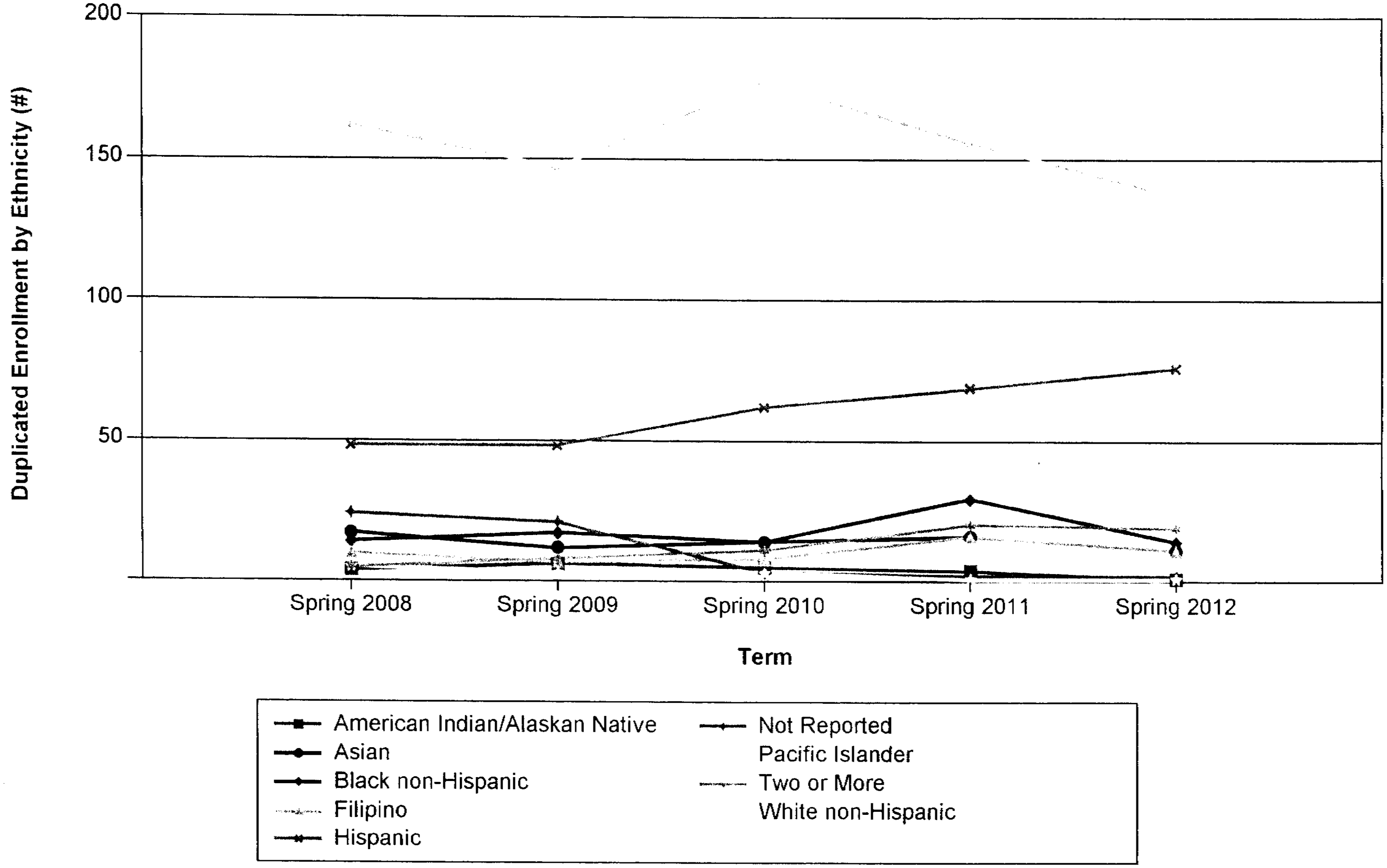
Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	3	1.2 %	6	2.4 %	4	1.4 %	4	1.3 %	1	0.4 %
Asian	12	4.7 %	11	4.4 %	14	4.8 %	13	4.2 %	11	4.3 %
Black non-Hispanic	14	5.5 %	14	5.6 %	14	4.8 %	29	9.3 %	14	5.4 %
Filipino	10	3.9 %	6	2.4 %	8	2.7 %	15	4.8 %	11	4.3 %
Hispanic	43	16.9 %	46	18.3 %	56	19.2 %	66	21.2 %	74	28.7 %
Not Reported	22	8.6 %	21	8.3 %	19	6.5 %	16	5.1 %	6	2.3 %
Pacific Islander	5	2.0 %	3	1.2 %	2	0.7 %	1	0.3 %	1	0.4 %
Two or More	4	1.6 %	7	2.8 %	11	3.8 %	20	6.4 %	17	6.6 %
White non-Hispanic	142	55.7 %	138	54.8 %	163	56.0 %	147	47.3 %	123	47.7 %
Total	255	100.0 %	252	100.0 %	291	100.0 %	311	100.0 %	258	100.0 %

278

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Ethnicity (Duplicated Student Count)

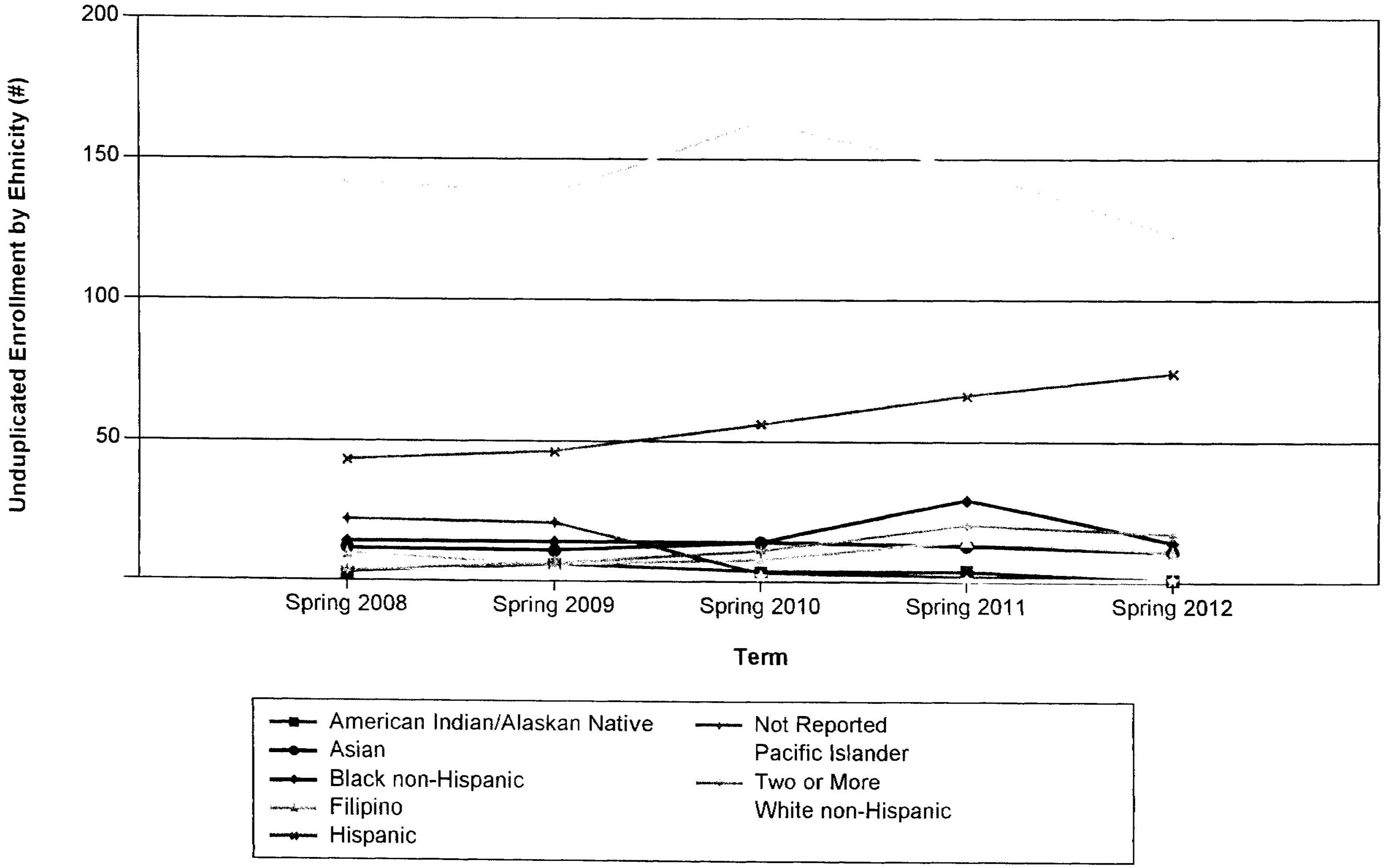


279

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

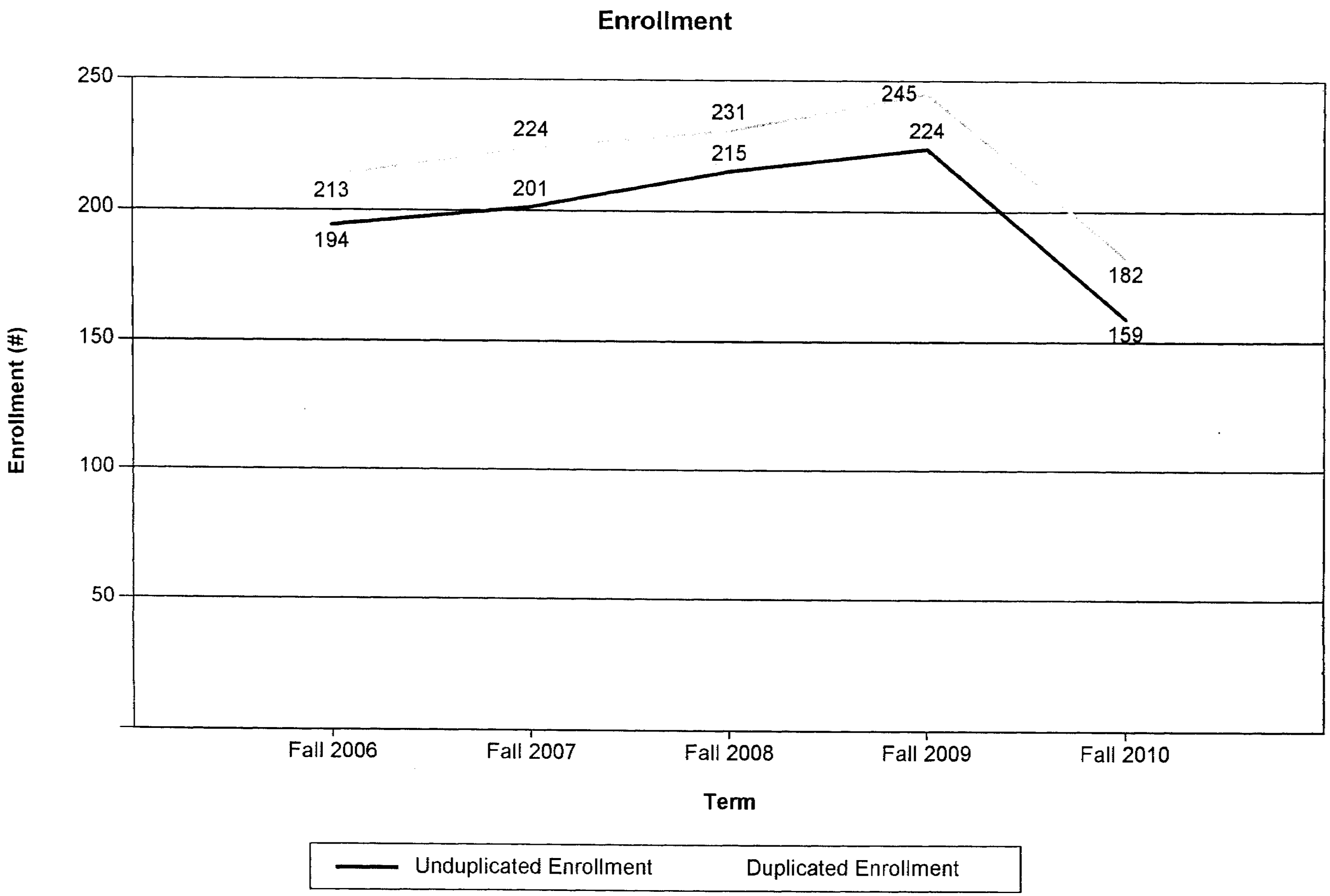
Grossmont College Enrollment
GEOL

Enrollment by Ethnicity (Unduplicated Student Count)



280

Grossmont College Enrollment
OCEA



281

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

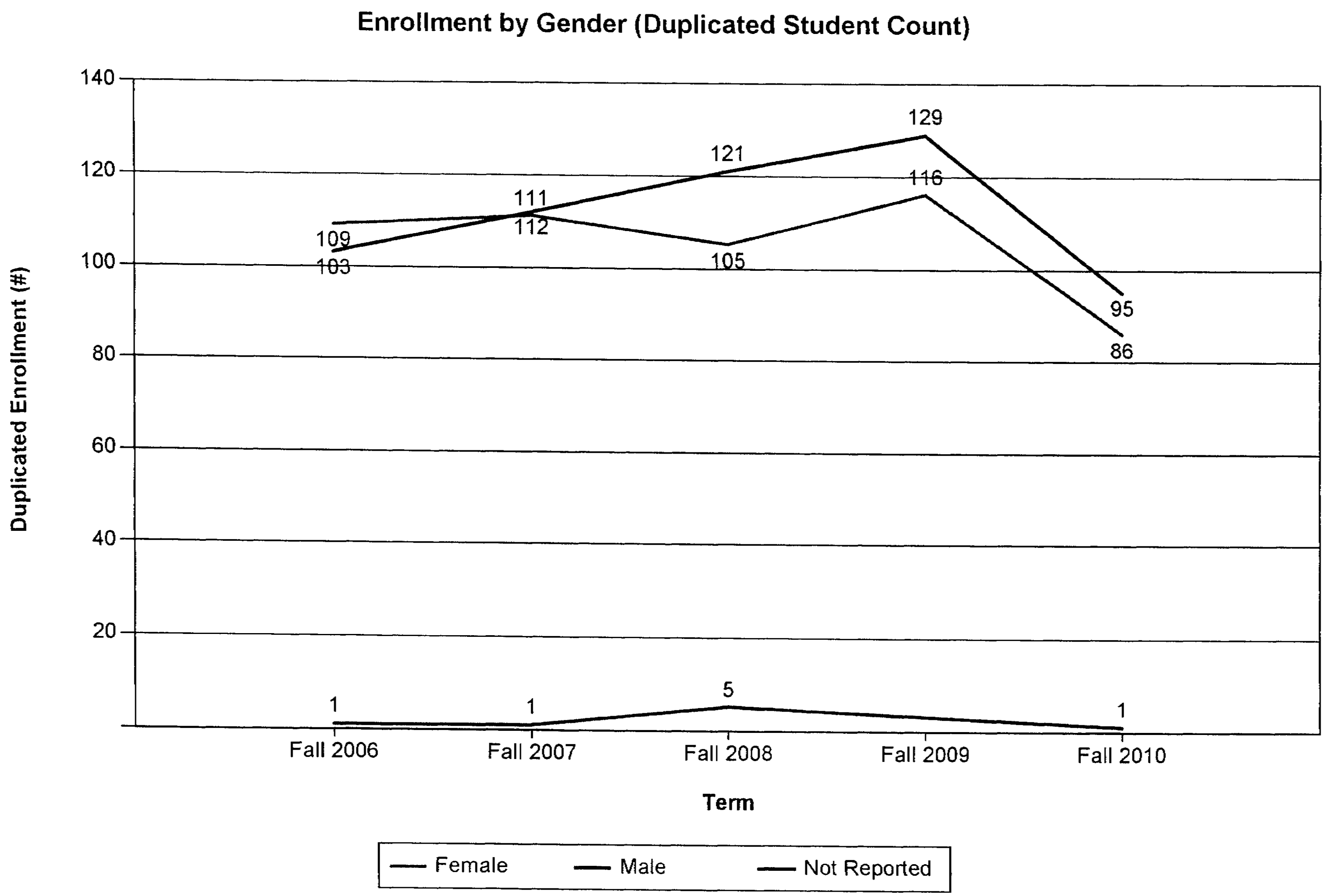
Enrollment by Gender (Duplicated Student Count)

Gender	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
Female	109	51.2 %	111	49.6 %	105	45.5 %	116	47.3 %	86	47.3 %
Male	103	48.4 %	112	50.0 %	121	52.4 %	129	52.7 %	95	52.2 %
Not Reported	1	0.5 %	1	0.4 %	5	2.2 %		0.0 %	1	0.5 %
Total	213	100.0 %	224	100.0 %	231	100.0 %	245	100.0 %	182	100.0 %

Enrollment by Gender (Unduplicated Student Count)

Gender	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
Female	97	50.0 %	99	49.3 %	95	44.2 %	105	46.9 %	73	45.9 %
Male	96	49.5 %	101	50.2 %	117	54.4 %	119	53.1 %	85	53.5 %
Not Reported	1	0.5 %	1	0.5 %	3	1.4 %		0.0 %	1	0.6 %
Total	194	100.0 %	201	100.0 %	215	100.0 %	224	100.0 %	159	100.0 %

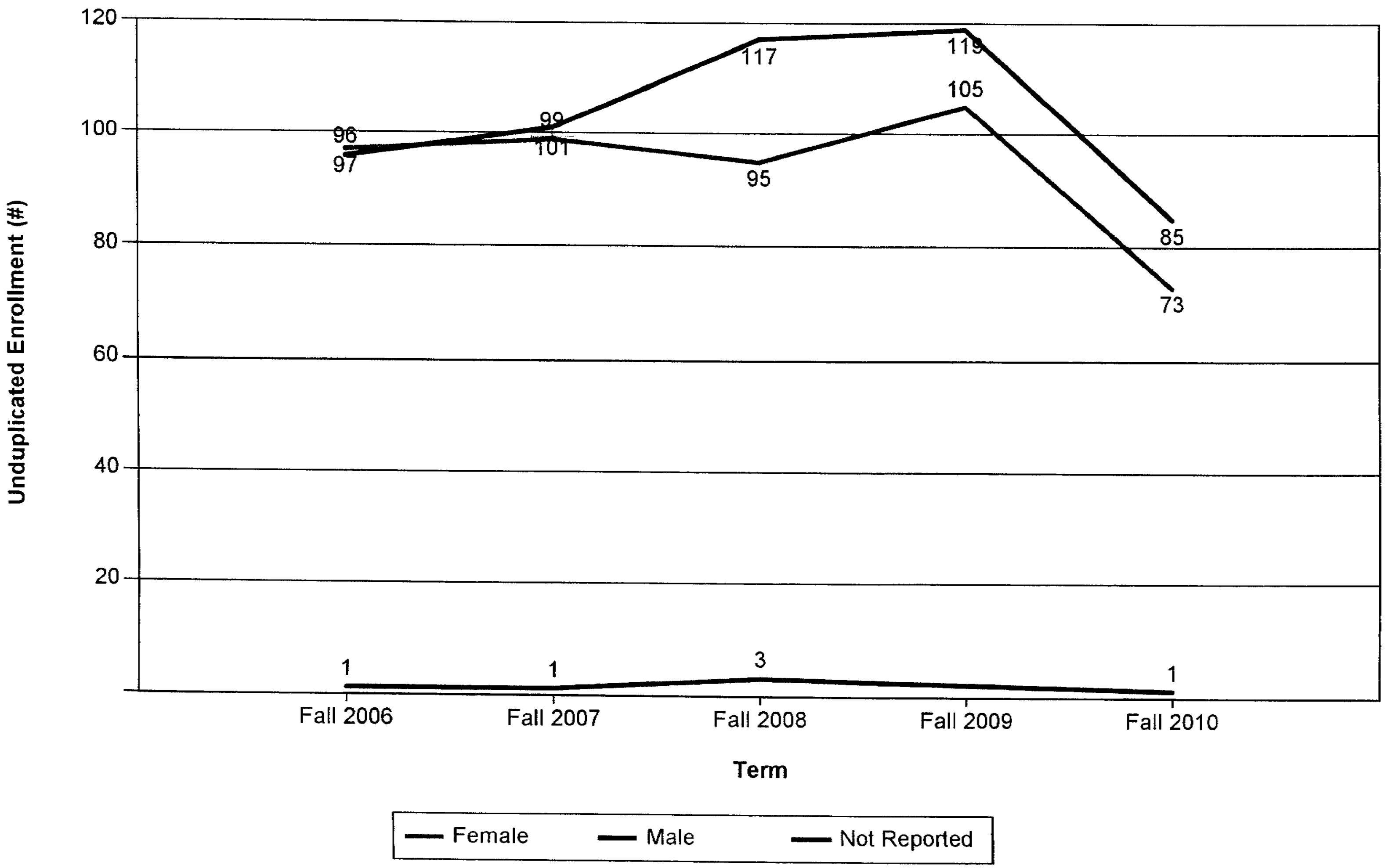
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.



283

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Gender (Unduplicated Student Count)



284

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Age (Duplicated Student Counts)

Age	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
19 or less	97	45.5 %	100	44.6 %	117	50.6 %	123	50.2 %	74	40.7 %
20-24	83	39.0 %	104	46.4 %	88	38.1 %	94	38.4 %	85	46.7 %
25-29	23	10.8 %	9	4.0 %	11	4.8 %	11	4.5 %	10	5.5 %
30-49	9	4.2 %	8	3.6 %	9	3.9 %	15	6.1 %	8	4.4 %
50+	1	0.5 %	3	1.3 %	6	2.6 %	2	0.8 %	5	2.7 %
Total	213	100.0 %	224	100.0 %	231	100.0 %	245	100.0 %	182	100.0 %

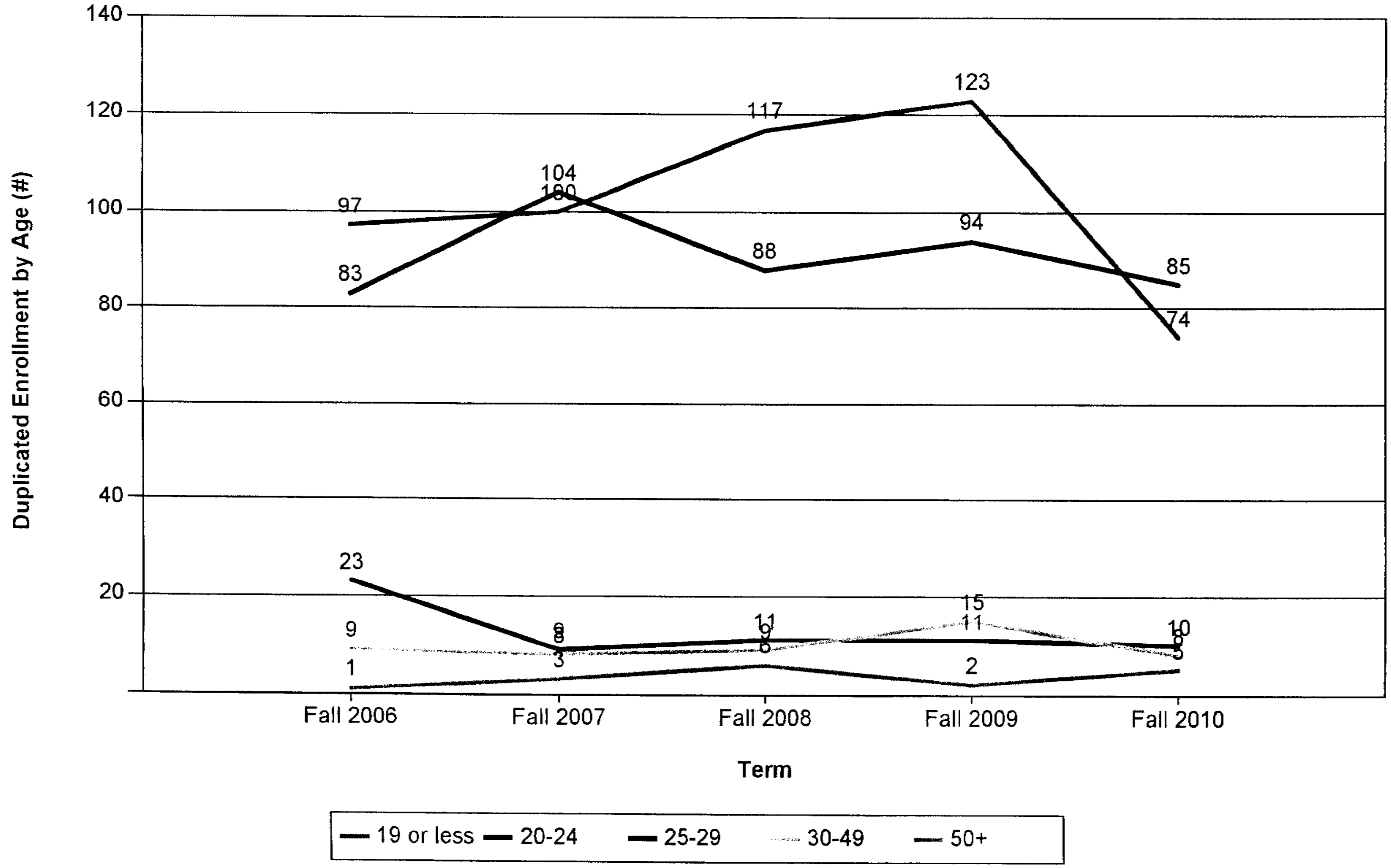
Enrollment by Age (Unduplicated Student Count)

Age	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
19 or less	91	46.9 %	93	46.3 %	107	49.8 %	113	50.4 %	62	39.0 %
20-24	73	37.6 %	91	45.3 %	84	39.1 %	85	37.9 %	77	48.4 %
25-29	21	10.8 %	8	4.0 %	11	5.1 %	10	4.5 %	10	6.3 %
30-49	8	4.1 %	7	3.5 %	9	4.2 %	14	6.2 %	6	3.8 %
50+	1	0.5 %	2	1.0 %	4	1.9 %	2	0.9 %	4	2.5 %
Total	194	100.0 %	201	100.0 %	215	100.0 %	224	100.0 %	159	100.0 %

285

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Age (Duplicated Student Count)

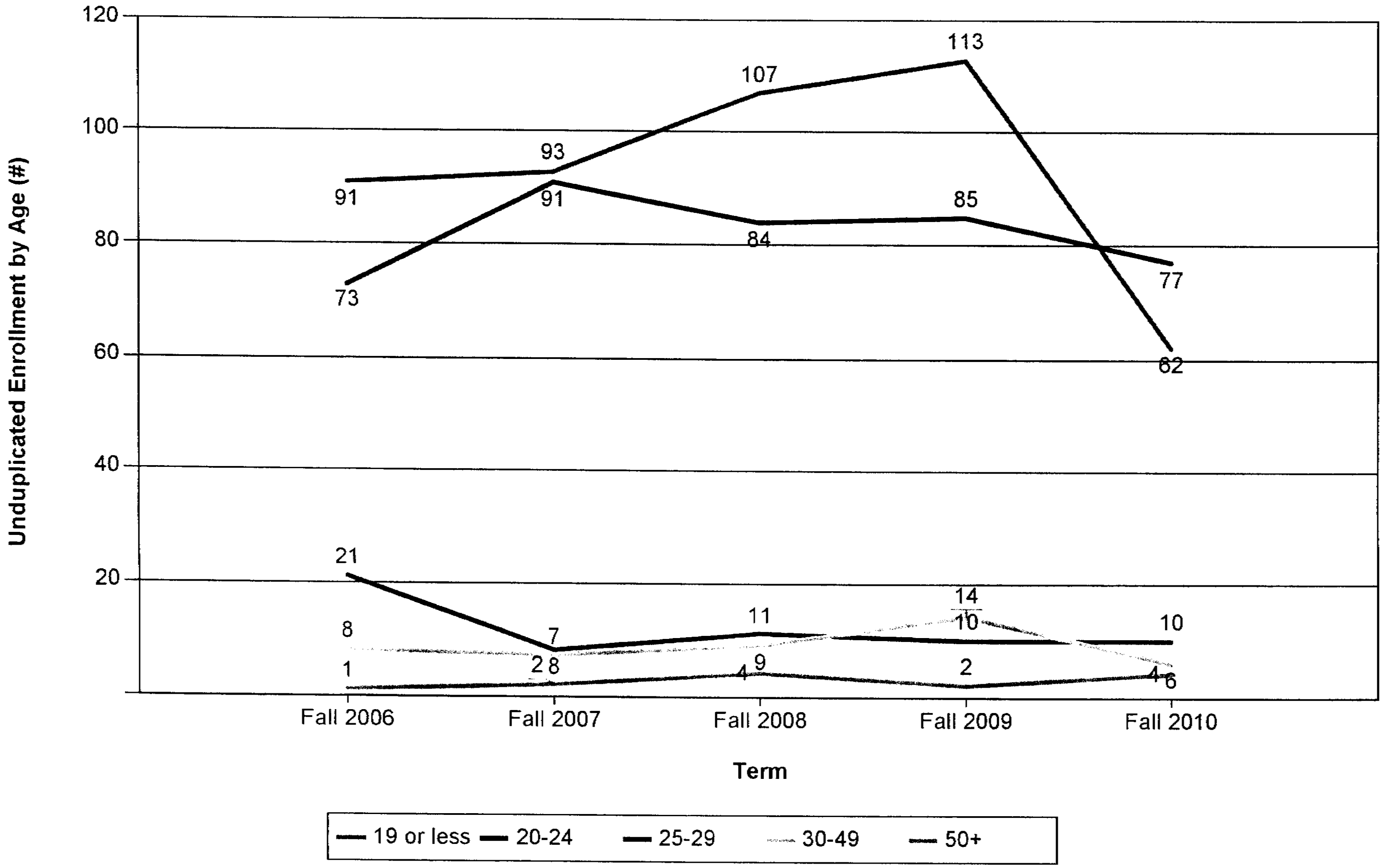


286

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Age (Unduplicated Student Count)



287

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	2	0.9 %	2	0.9 %	5	2.2 %	4	1.6 %		0.0 %
Asian	5	2.3 %	8	3.6 %	4	1.7 %	6	2.4 %	6	3.3 %
Black non-Hispanic	3	1.4 %	6	2.7 %	14	6.1 %	6	2.4 %	10	5.5 %
Filipino	3	1.4 %	4	1.8 %	8	3.5 %	7	2.9 %	7	3.8 %
Hispanic	27	12.7 %	32	14.3 %	45	19.5 %	58	23.7 %	31	17.0 %
Not Reported	23	10.8 %	22	9.8 %	14	6.1 %	9	3.7 %	11	6.0 %
Pacific Islander	3	1.4 %	6	2.7 %	4	1.7 %	5	2.0 %	3	1.6 %
Two or More	2	0.9 %	3	1.3 %	3	1.3 %	9	3.7 %	13	7.1 %
White non-Hispanic	145	68.1 %	141	62.9 %	134	58.0 %	141	57.6 %	101	55.5 %
Total	213	100.0 %	224	100.0 %	231	100.0 %	245	100.0 %	182	100.0 %

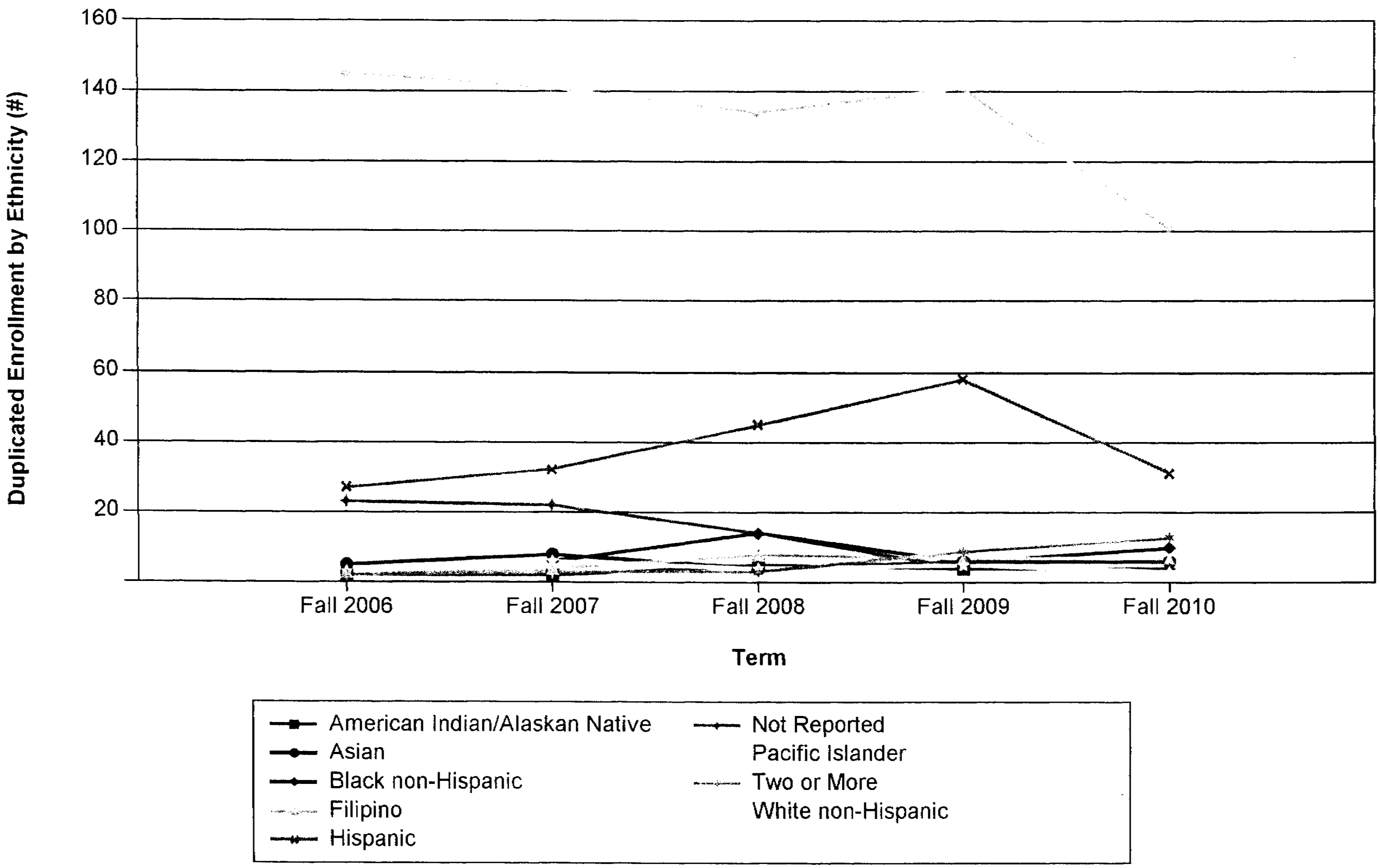
Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2010	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	2	1.0 %	1	0.5 %	4	1.9 %	4	1.8 %		0.0 %
Asian	5	2.6 %	8	4.0 %	4	1.9 %	5	2.2 %	5	3.1 %
Black non-Hispanic	3	1.5 %	5	2.5 %	13	6.0 %	6	2.7 %	9	5.7 %
Filipino	3	1.5 %	4	2.0 %	8	3.7 %	7	3.1 %	7	4.4 %
Hispanic	26	13.4 %	32	15.9 %	41	19.1 %	55	24.6 %	29	18.2 %
Not Reported	21	10.8 %	19	9.5 %	14	6.5 %	9	4.0 %	9	5.7 %
Pacific Islander	2	1.0 %	5	2.5 %	4	1.9 %	5	2.2 %	2	1.3 %
Two or More	2	1.0 %	2	1.0 %	3	1.4 %	8	3.6 %	11	6.9 %
White non-Hispanic	130	67.0 %	125	62.2 %	124	57.7 %	125	55.8 %	87	54.7 %
Total	194	100.0 %	201	100.0 %	215	100.0 %	224	100.0 %	159	100.0 %

288

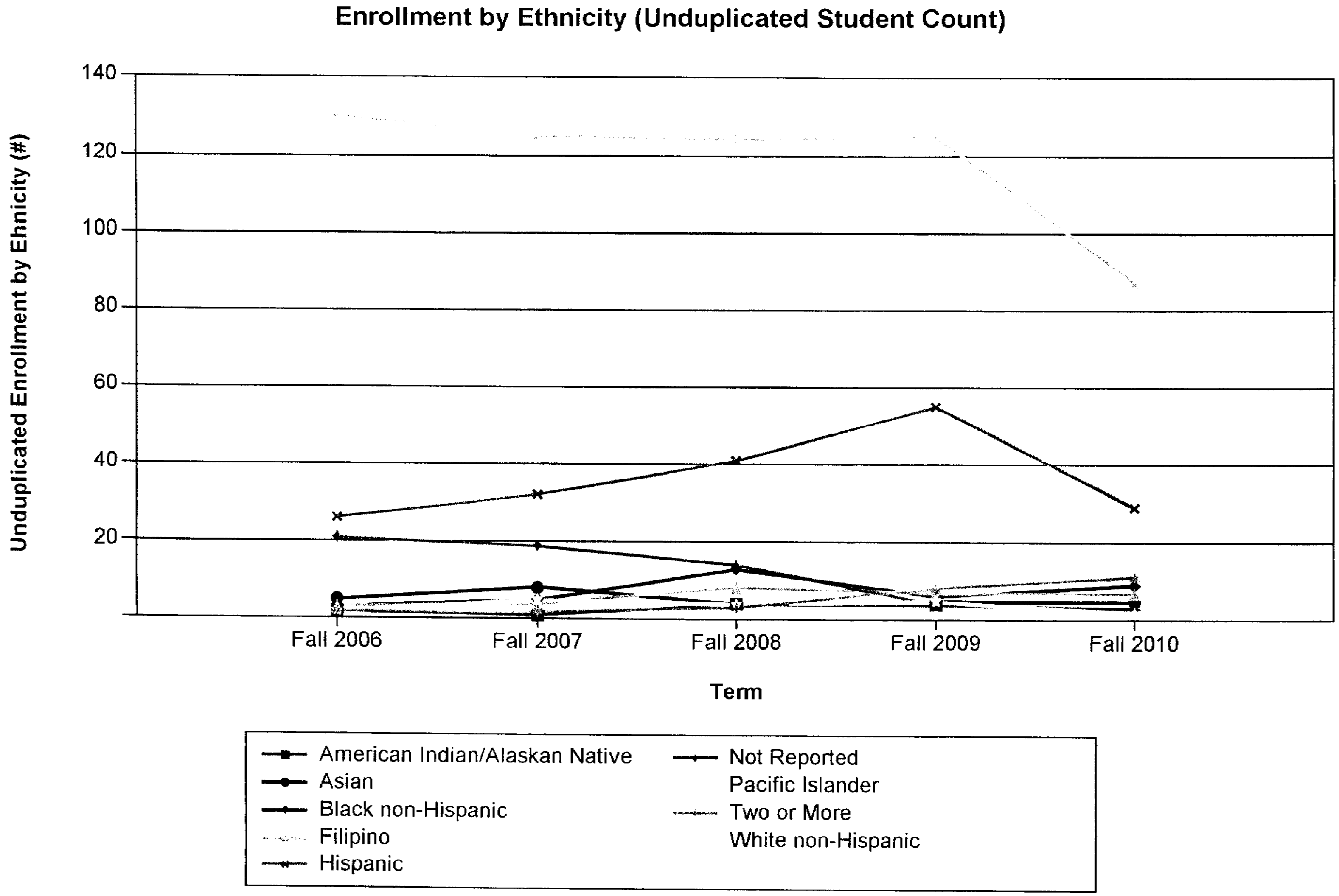
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Ethnicity (Duplicated Student Count)



289

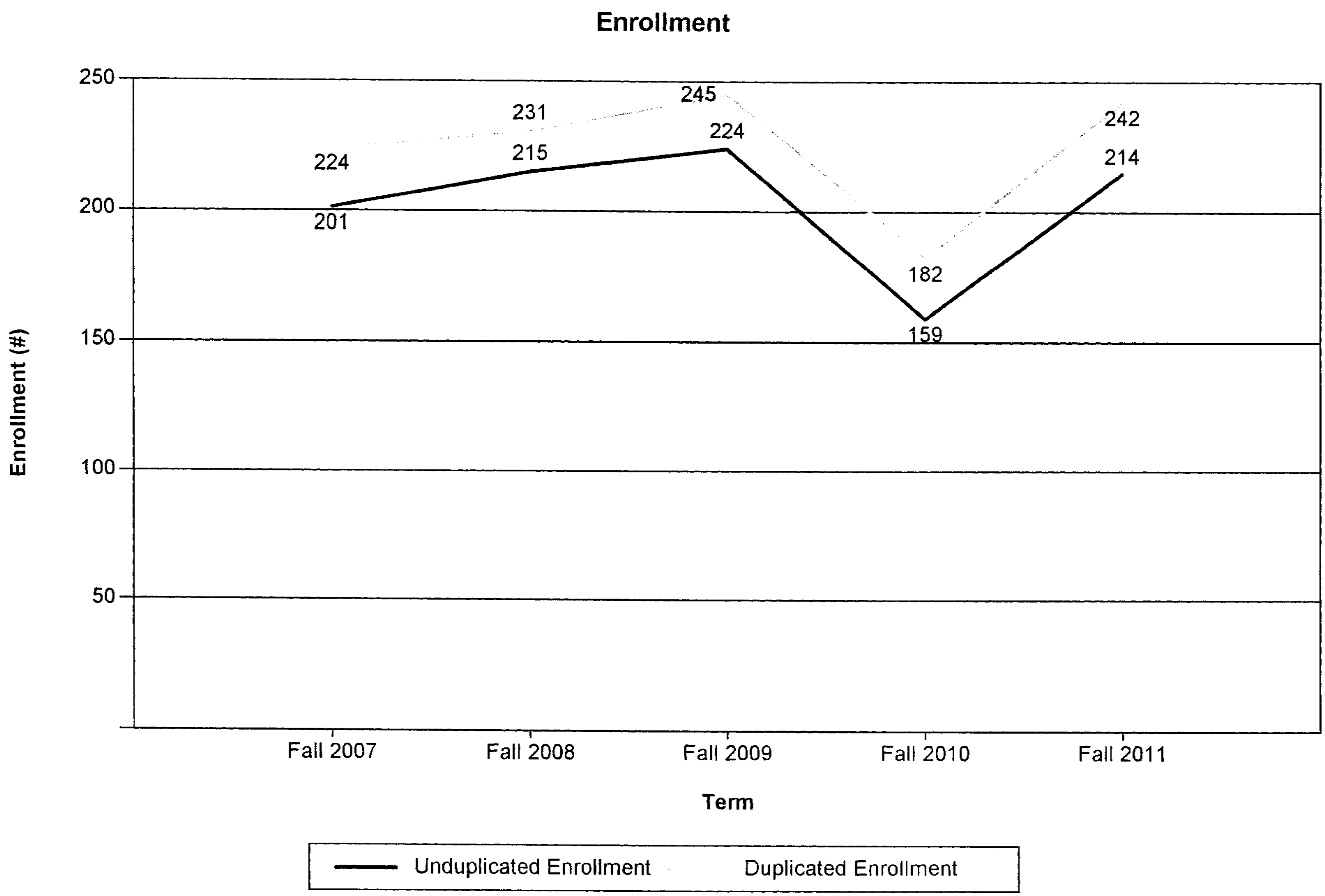
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount



290

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA



291

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Gender (Duplicated Student Count)

Gender	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
Female	111	49.6 %	105	45.5 %	116	47.3 %	86	47.3 %	120	49.6 %
Male	112	50.0 %	121	52.4 %	129	52.7 %	95	52.2 %	119	49.2 %
Not Reported	1	0.4 %	5	2.2 %		0.0 %	1	0.5 %	3	1.2 %
Total	224	100.0 %	231	100.0 %	245	100.0 %	182	100.0 %	242	100.0 %

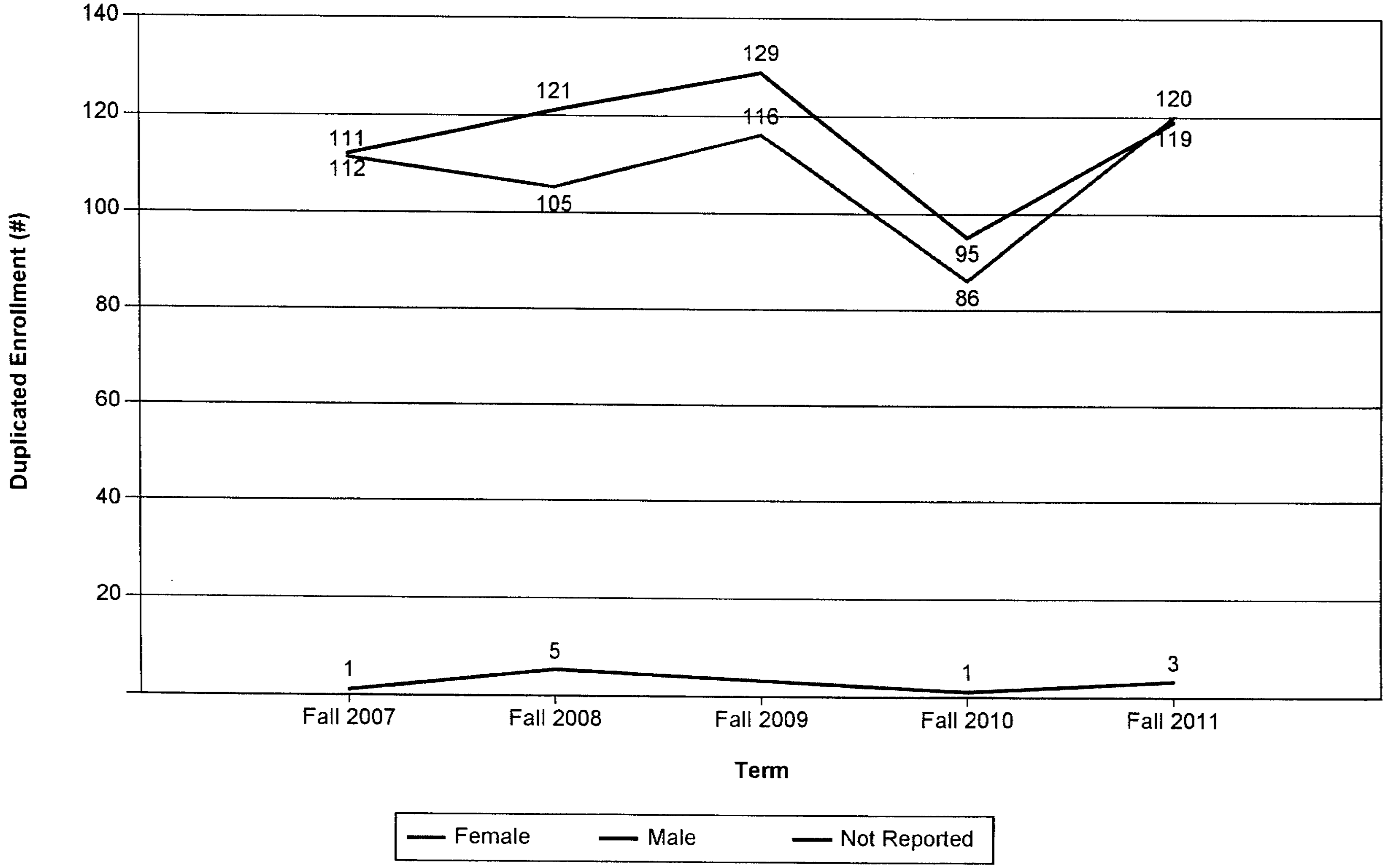
Enrollment by Gender (Unduplicated Student Count)

Gender	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
Female	99	49.3 %	95	44.2 %	105	46.9 %	73	45.9 %	108	50.5 %
Male	101	50.2 %	117	54.4 %	119	53.1 %	85	53.5 %	104	48.6 %
Not Reported	1	0.5 %	3	1.4 %		0.0 %	1	0.6 %	2	0.9 %
Total	201	100.0 %	215	100.0 %	224	100.0 %	159	100.0 %	214	100.0 %

292

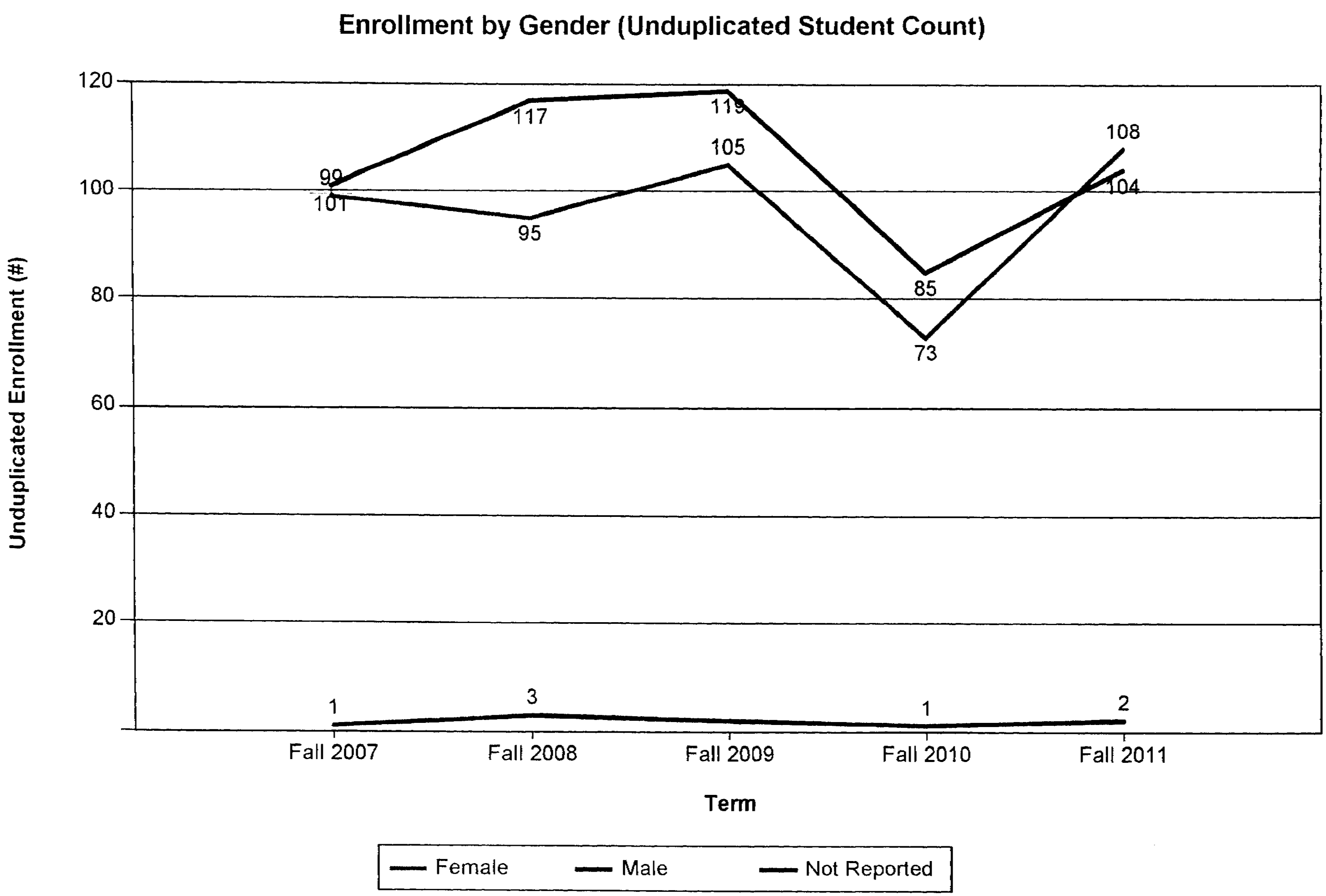
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Gender (Duplicated Student Count)



Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA



294

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Age (Duplicated Student Counts)

Age	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	100	44.6 %	117	50.6 %	123	50.2 %	74	40.7 %	119	49.2 %
20-24	104	46.4 %	88	38.1 %	94	38.4 %	85	46.7 %	88	36.4 %
25-29	9	4.0 %	11	4.8 %	11	4.5 %	10	5.5 %	22	9.1 %
30-49	8	3.6 %	9	3.9 %	15	6.1 %	8	4.4 %	12	5.0 %
50+	3	1.3 %	6	2.6 %	2	0.8 %	5	2.7 %	1	0.4 %
Total	224	100.0 %	231	100.0 %	245	100.0 %	182	100.0 %	242	100.0 %

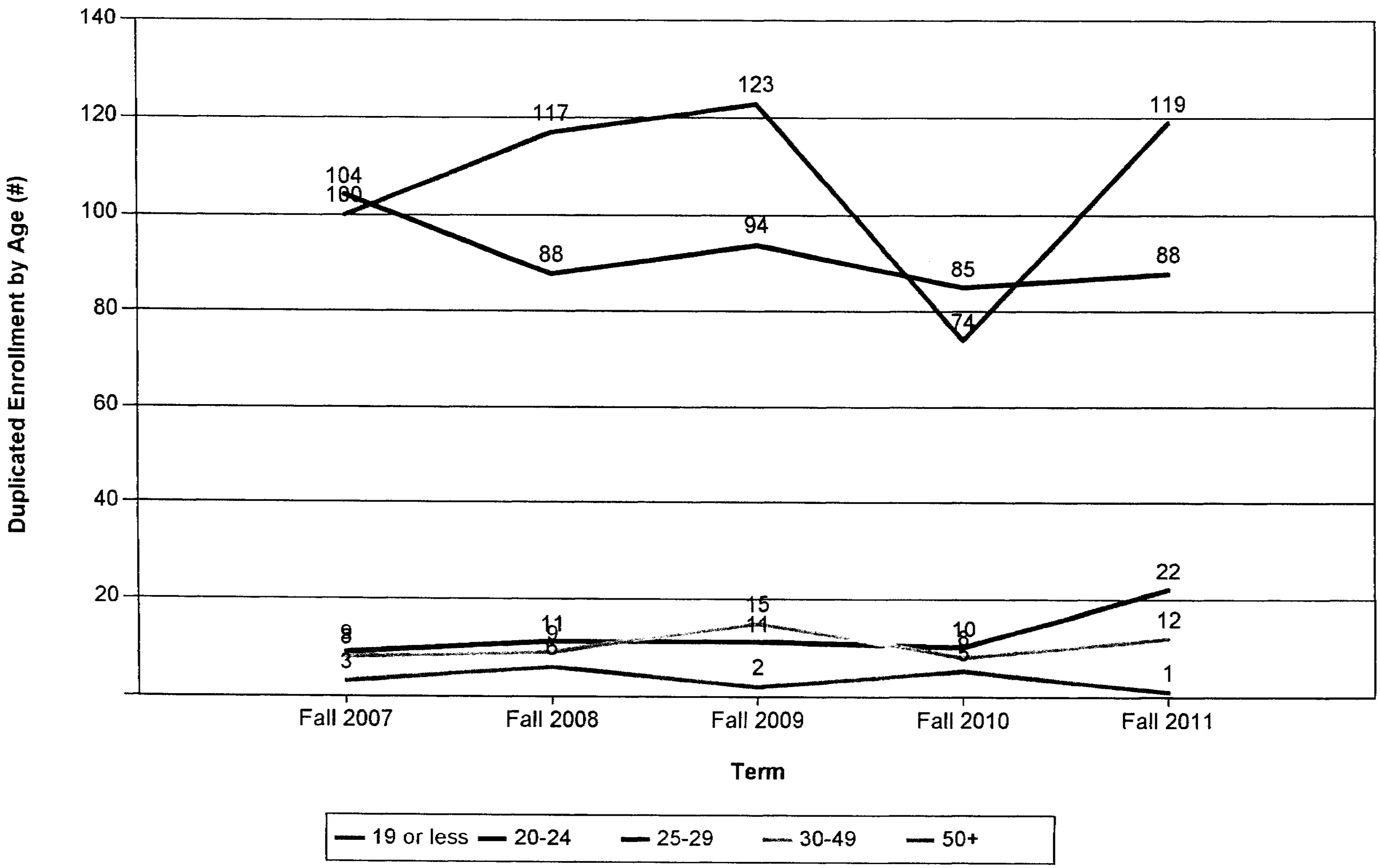
Enrollment by Age (Unduplicated Student Count)

Age	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	93	46.3 %	107	49.8 %	113	50.4 %	62	39.0 %	107	50.0 %
20-24	91	45.3 %	84	39.1 %	85	37.9 %	77	48.4 %	78	36.4 %
25-29	8	4.0 %	11	5.1 %	10	4.5 %	10	6.3 %	17	7.9 %
30-49	7	3.5 %	9	4.2 %	14	6.2 %	6	3.8 %	11	5.1 %
50+	2	1.0 %	4	1.9 %	2	0.9 %	4	2.5 %	1	0.5 %
Total	201	100.0 %	215	100.0 %	224	100.0 %	159	100.0 %	214	100.0 %

295

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

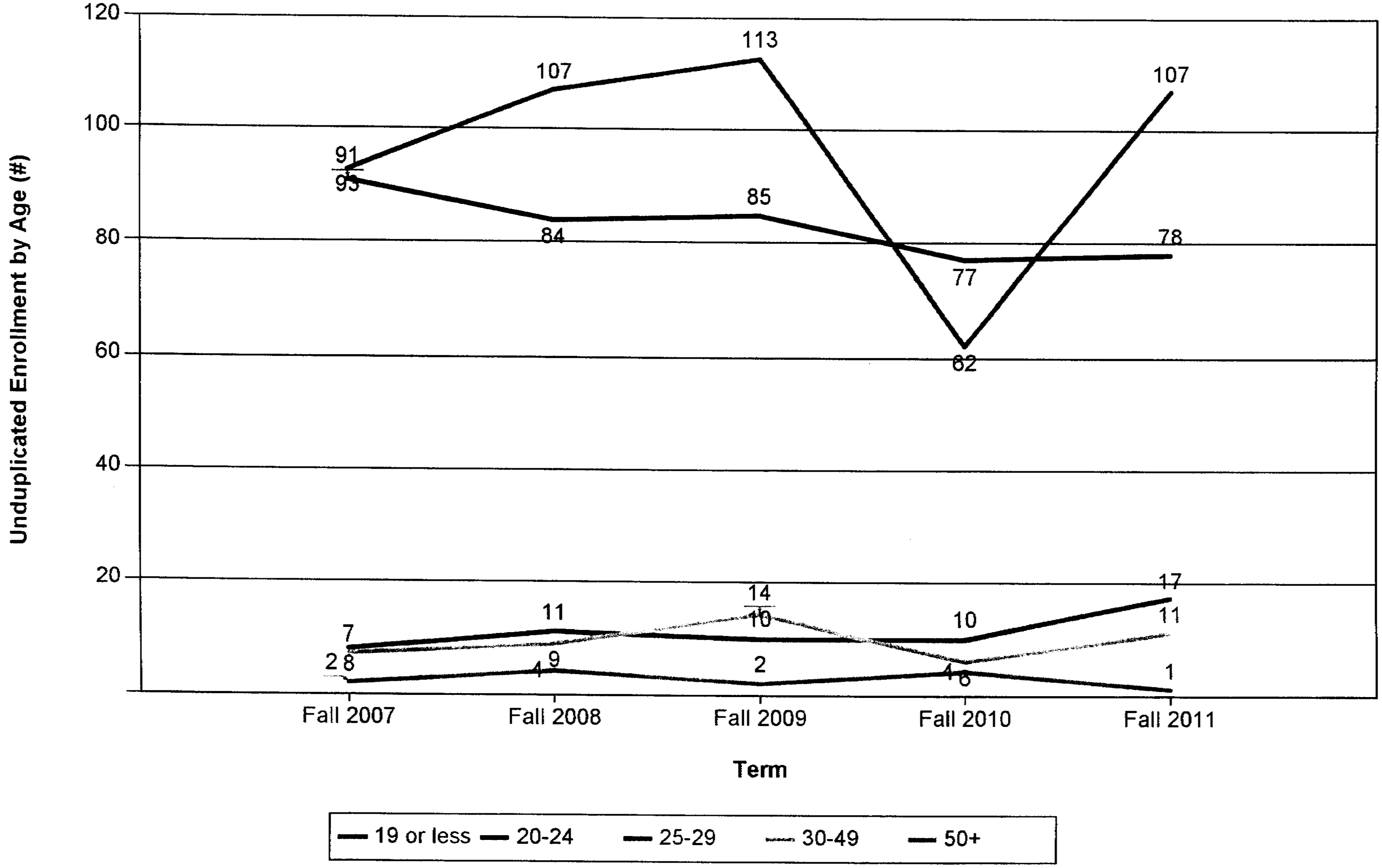
Enrollment by Age (Duplicated Student Count)



296

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Age (Unduplicated Student Count)



297

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Ethnicity (Duplicated Student Counts)

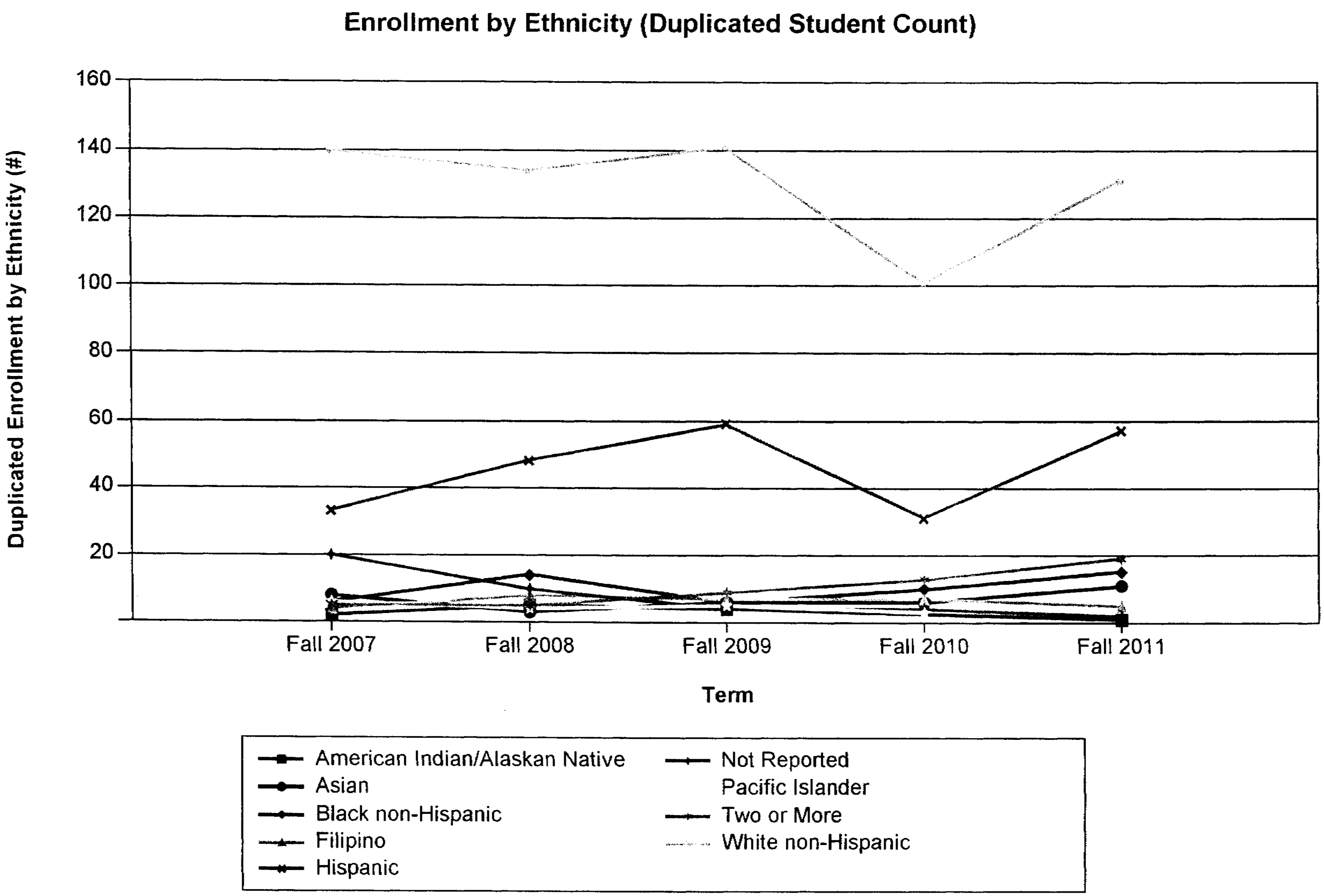
Ethnicity	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	2	0.9 %	5	2.2 %	4	1.6 %		0.0 %	1	0.4 %
Asian	8	3.6 %	3	1.3 %	6	2.4 %	6	3.3 %	11	4.5 %
Black non-Hispanic	6	2.7 %	14	6.1 %	6	2.4 %	10	5.5 %	15	6.2 %
Filipino	4	1.8 %	8	3.5 %	7	2.9 %	7	3.8 %	5	2.1 %
Hispanic	33	14.7 %	48	20.8 %	59	24.1 %	31	17.0 %	57	23.6 %
Not Reported	20	8.9 %	10	4.3 %	8	3.3 %	11	6.0 %	3	1.2 %
Pacific Islander	6	2.7 %	4	1.7 %	5	2.0 %	3	1.6 %		0.0 %
Two or More	5	2.2 %	5	2.2 %	9	3.7 %	13	7.1 %	19	7.9 %
White non-Hispanic	140	62.5 %	134	58.0 %	141	57.6 %	101	55.5 %	131	54.1 %
Total	224	100.0 %	231	100.0 %	245	100.0 %	182	100.0 %	242	100.0 %

Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Fall 2007		Fall 2008		Fall 2009		Fall 2010		Fall 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	1	0.5 %	4	1.9 %	4	1.8 %		0.0 %	1	0.5 %
Asian	8	4.0 %	3	1.4 %	5	2.2 %	5	3.1 %	10	4.7 %
Black non-Hispanic	5	2.5 %	13	6.0 %	6	2.7 %	9	5.7 %	13	6.1 %
Filipino	4	2.0 %	8	3.7 %	7	3.1 %	7	4.4 %	5	2.3 %
Hispanic	33	16.4 %	44	20.5 %	56	25.0 %	29	18.2 %	52	24.3 %
Not Reported	17	8.5 %	10	4.7 %	8	3.6 %	9	5.7 %	2	0.9 %
Pacific Islander	5	2.5 %	4	1.9 %	5	2.2 %	2	1.3 %		0.0 %
Two or More	4	2.0 %	5	2.3 %	8	3.6 %	11	6.9 %	17	7.9 %
White non-Hispanic	124	61.7 %	124	57.7 %	125	55.8 %	87	54.7 %	114	53.3 %
Total	201	100.0 %	215	100.0 %	224	100.0 %	159	100.0 %	214	100.0 %

298

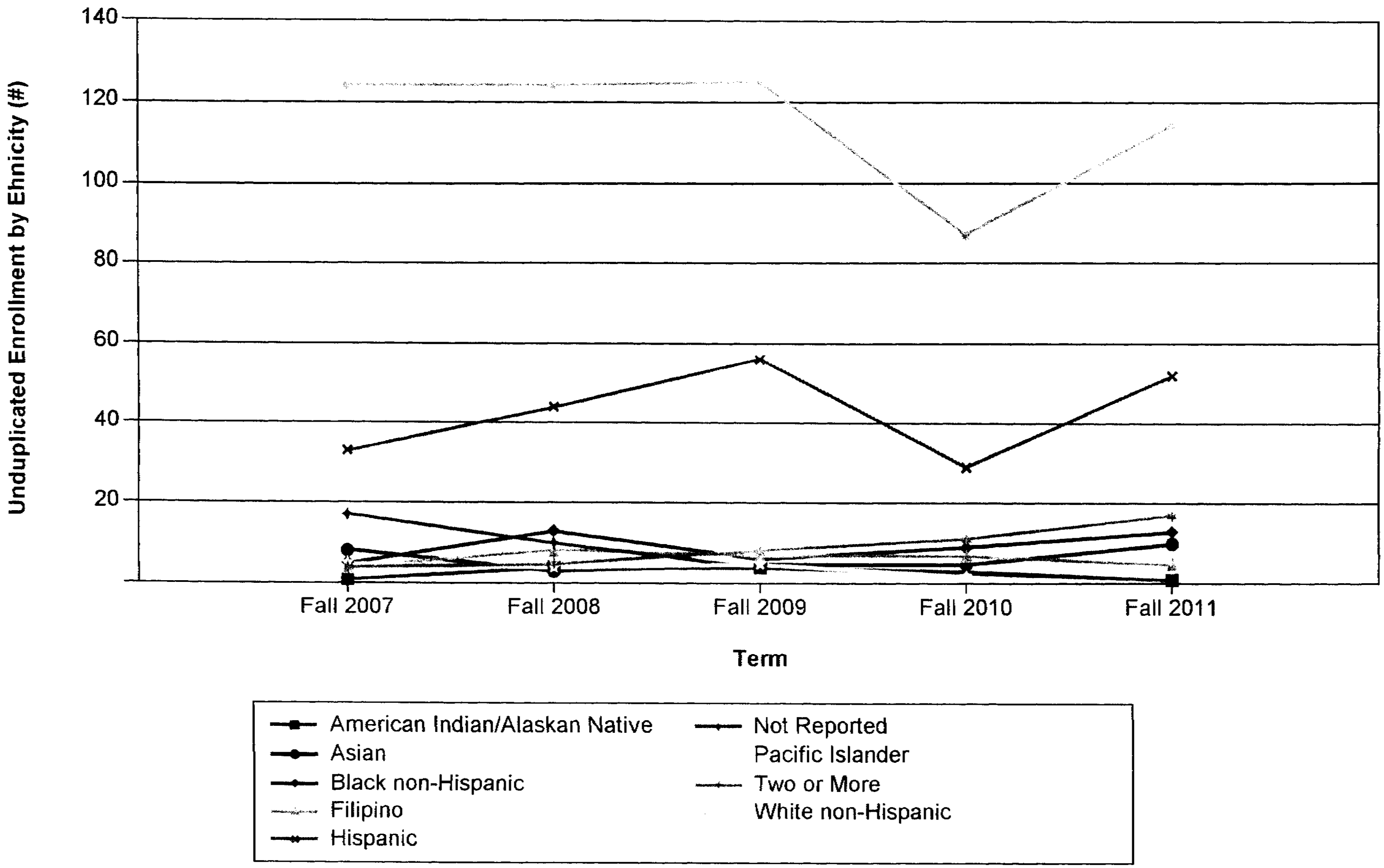
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.



Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

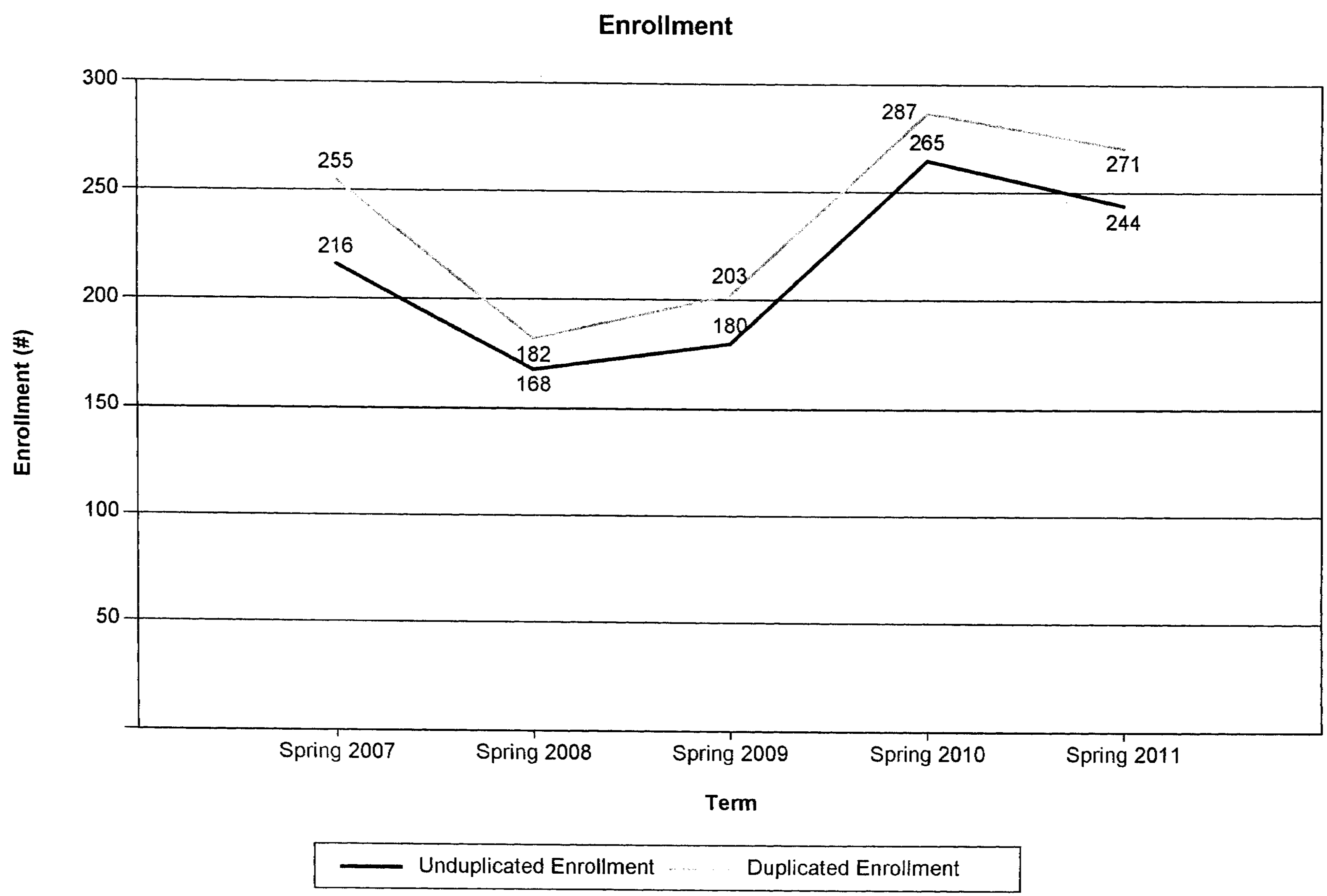
Grossmont College Enrollment
OCEA

Enrollment by Ethnicity (Unduplicated Student Count)



300

Grossmont College Enrollment
OCEA



301

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Gender (Duplicated Student Count)

Gender	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
Female	135	52.9 %	77	42.3 %	102	50.2 %	131	45.6 %	134	49.4 %
Male	118	46.3 %	105	57.7 %	99	48.8 %	156	54.4 %	136	50.2 %
Not Reported	2	0.8 %		0.0 %	2	1.0 %		0.0 %	1	0.4 %
Total	255	100.0 %	182	100.0 %	203	100.0 %	287	100.0 %	271	100.0 %

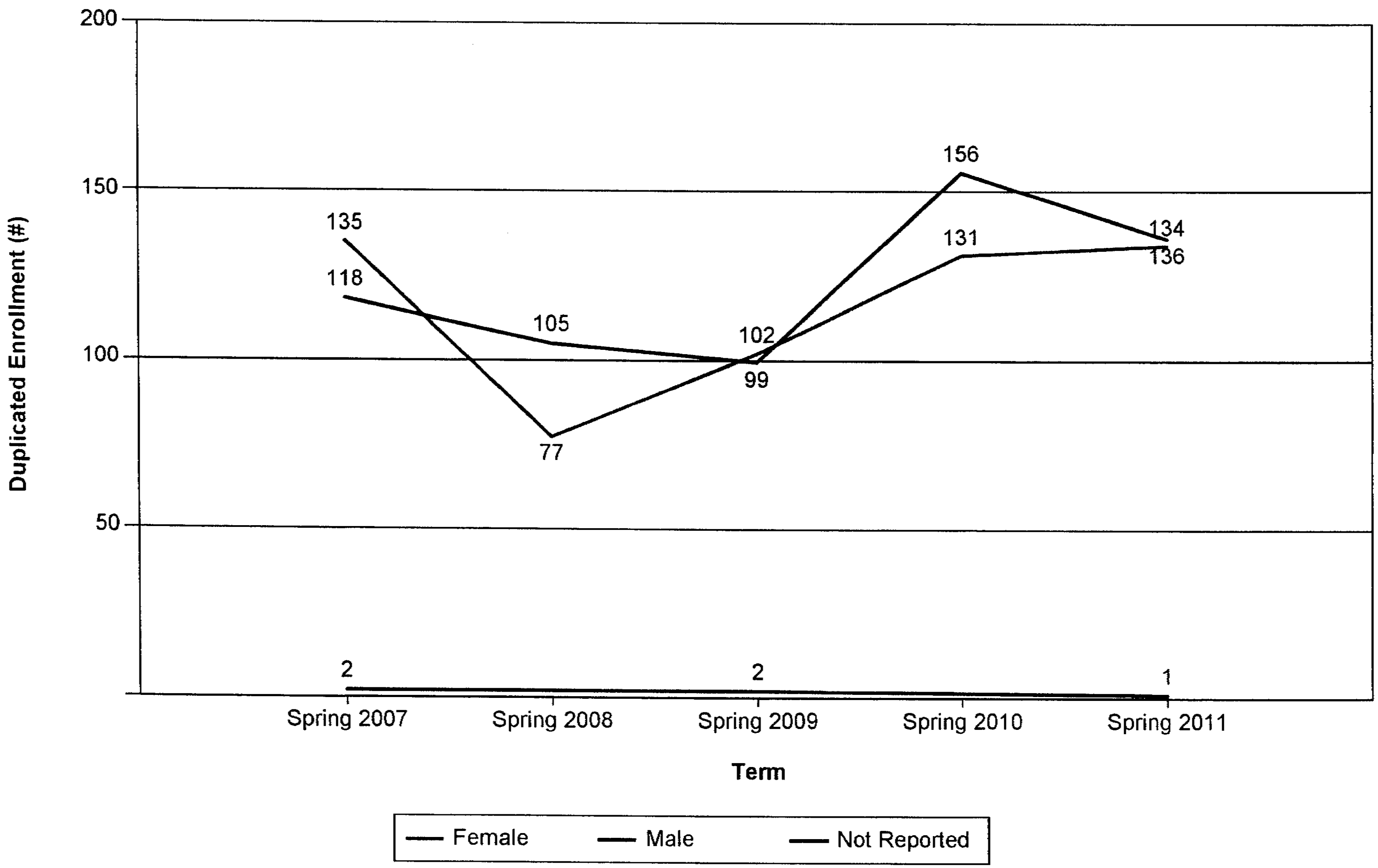
Enrollment by Gender (Unduplicated Student Count)

Gender	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
Female	111	51.4 %	71	42.3 %	89	49.4 %	123	46.4 %	124	50.8 %
Male	103	47.7 %	97	57.7 %	89	49.4 %	142	53.6 %	119	48.8 %
Not Reported	2	0.9 %		0.0 %	2	1.1 %		0.0 %	1	0.4 %
Total	216	100.0 %	168	100.0 %	180	100.0 %	265	100.0 %	244	100.0 %

302

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

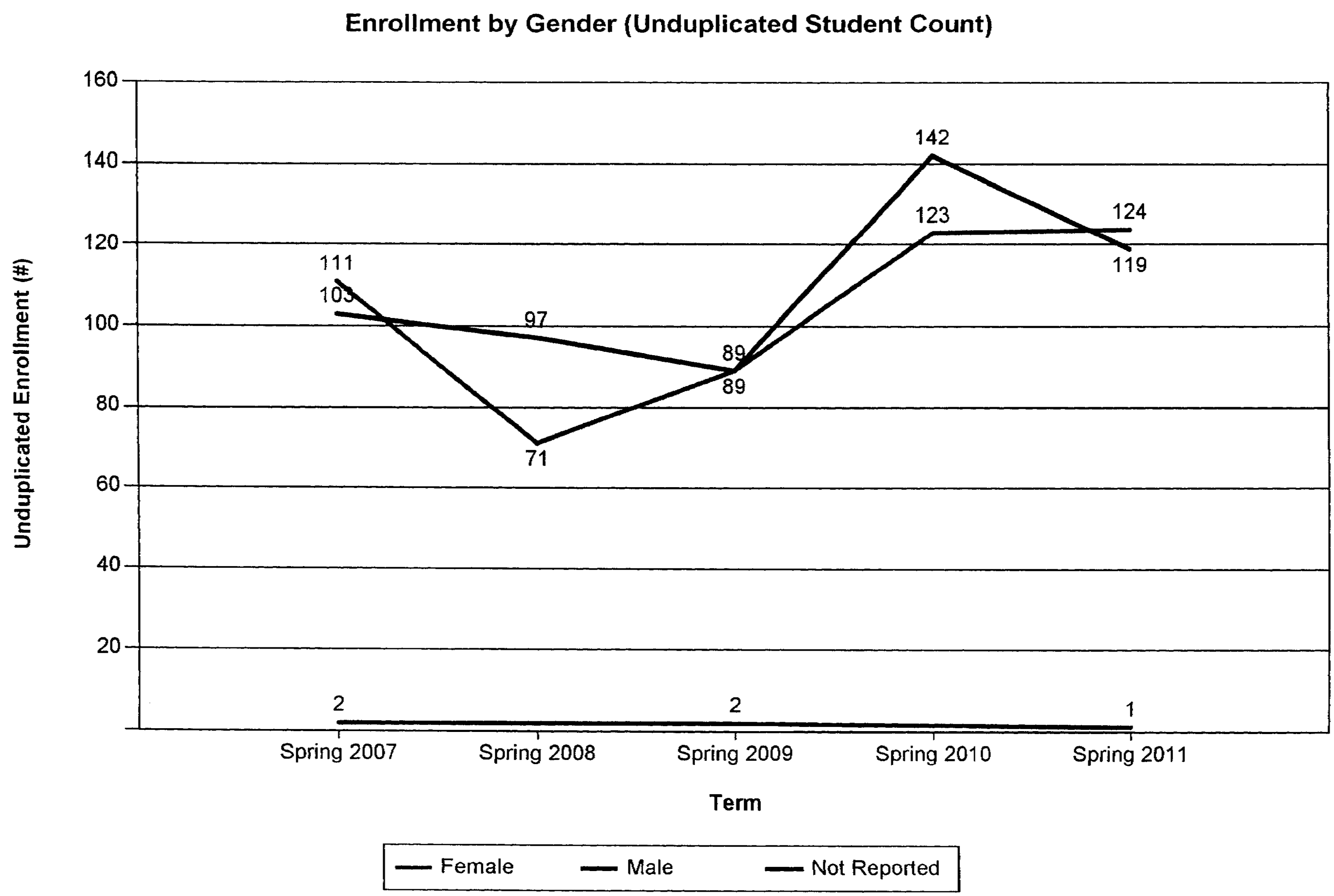
Enrollment by Gender (Duplicated Student Count)



303

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA



304

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount

Grossmont College Enrollment
OCEA

Enrollment by Age (Duplicated Student Counts)

Age	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	96	37.6 %	80	44.0 %	101	49.8 %	140	48.8 %	115	42.4 %
20-24	121	47.5 %	78	42.9 %	77	37.9 %	105	36.6 %	105	38.7 %
25-29	27	10.6 %	13	7.1 %	15	7.4 %	27	9.4 %	28	10.3 %
30-49	8	3.1 %	5	2.7 %	8	3.9 %	14	4.9 %	20	7.4 %
50+	3	1.2 %	6	3.3 %	2	1.0 %	1	0.3 %	3	1.1 %
Total	255	100.0 %	182	100.0 %	203	100.0 %	287	100.0 %	271	100.0 %

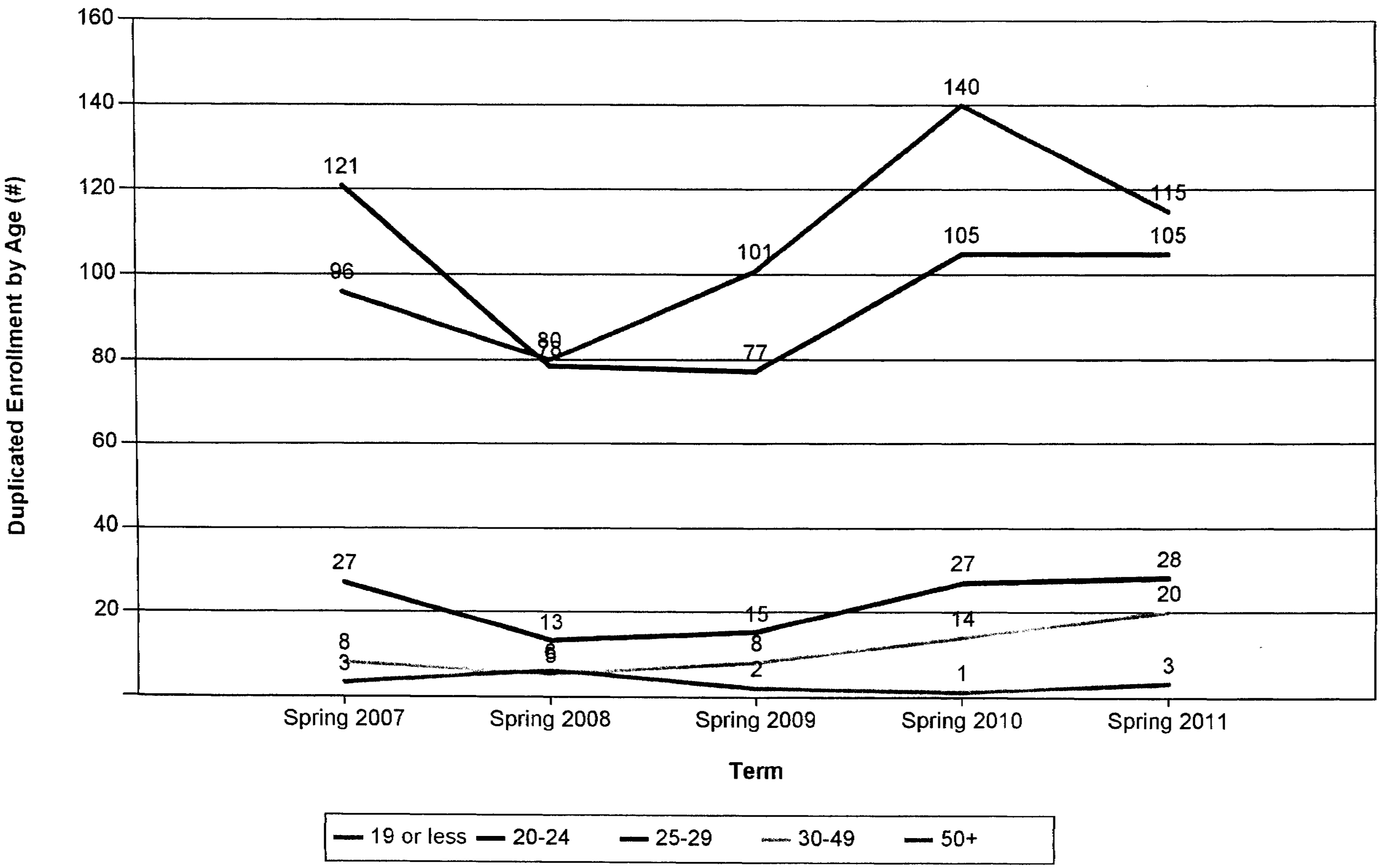
Enrollment by Age (Unduplicated Student Count)

Age	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
19 or less	84	38.9 %	73	43.5 %	91	50.6 %	125	47.2 %	108	44.3 %
20-24	100	46.3 %	72	42.9 %	68	37.8 %	100	37.7 %	95	38.9 %
25-29	23	10.6 %	13	7.7 %	12	6.7 %	27	10.2 %	24	9.8 %
30-49	7	3.2 %	5	3.0 %	7	3.9 %	12	4.5 %	15	6.1 %
50+	2	0.9 %	5	3.0 %	2	1.1 %	1	0.4 %	2	0.8 %
Total	216	100.0 %	168	100.0 %	180	100.0 %	265	100.0 %	244	100.0 %

305

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

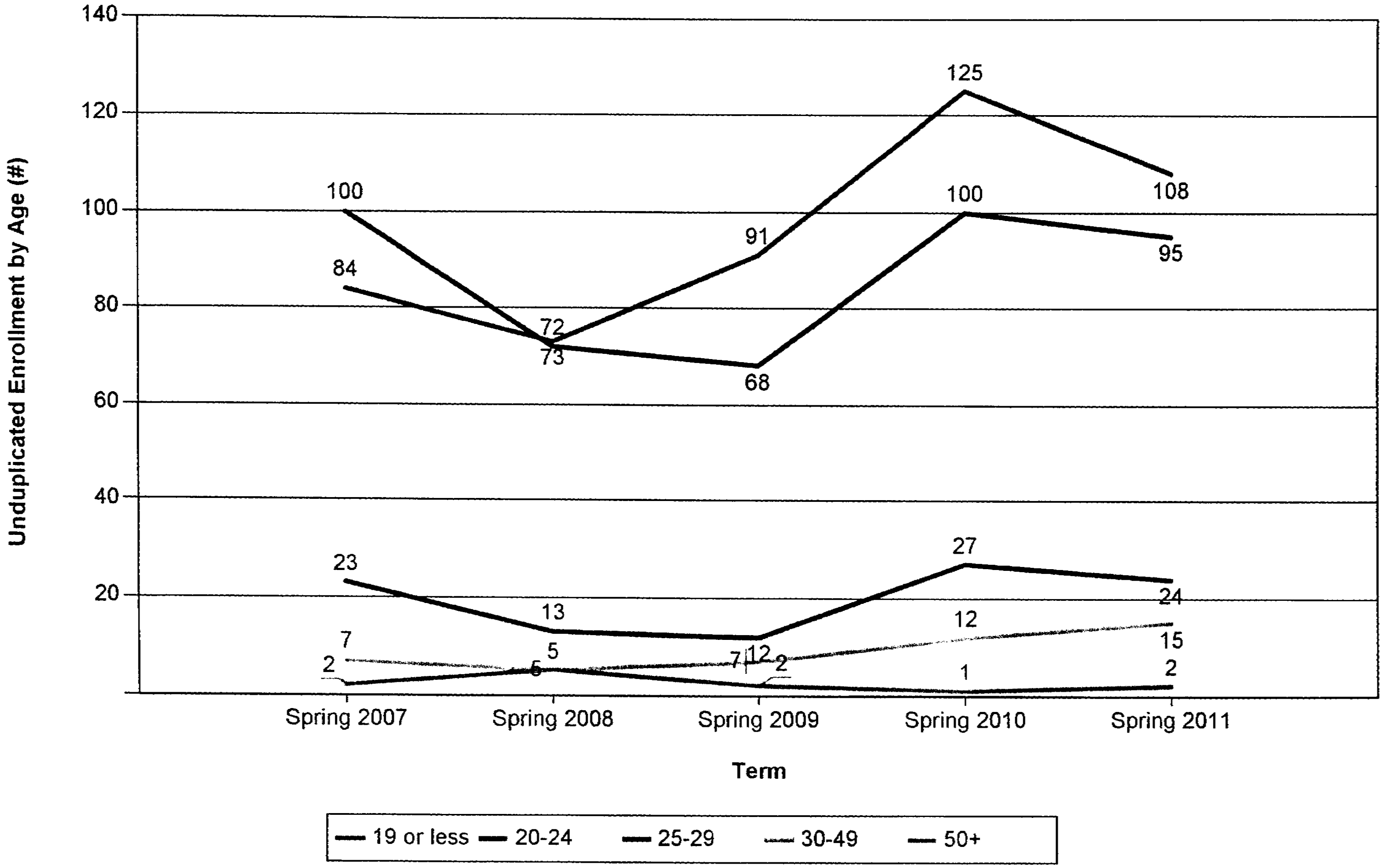
Enrollment by Age (Duplicated Student Count)



306

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Age (Unduplicated Student Count)



307

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student head

Grossmont College Enrollment
OCEA

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	1	0.4 %	4	2.2 %	4	2.0 %		0.0 %	2	0.7 %
Asian	24	9.4 %	14	7.7 %	9	4.4 %	10	3.5 %	12	4.4 %
Black non-Hispanic	13	5.1 %	6	3.3 %	7	3.4 %	15	5.2 %	15	5.5 %
Filipino	6	2.4 %	4	2.2 %	6	3.0 %	3	1.0 %	11	4.1 %
Hispanic	40	15.7 %	27	14.8 %	28	13.8 %	67	23.3 %	66	24.4 %
Not Reported	21	8.2 %	13	7.1 %	12	5.9 %	13	4.5 %	12	4.4 %
Pacific Islander	9	3.5 %	2	1.1 %	4	2.0 %	6	2.1 %	4	1.5 %
Two or More	3	1.2 %	2	1.1 %	2	1.0 %	16	5.6 %	18	6.6 %
White non-Hispanic	138	54.1 %	110	60.4 %	131	64.5 %	157	54.7 %	131	48.3 %
Total	255	100.0 %	182	100.0 %	203	100.0 %	287	100.0 %	271	100.0 %

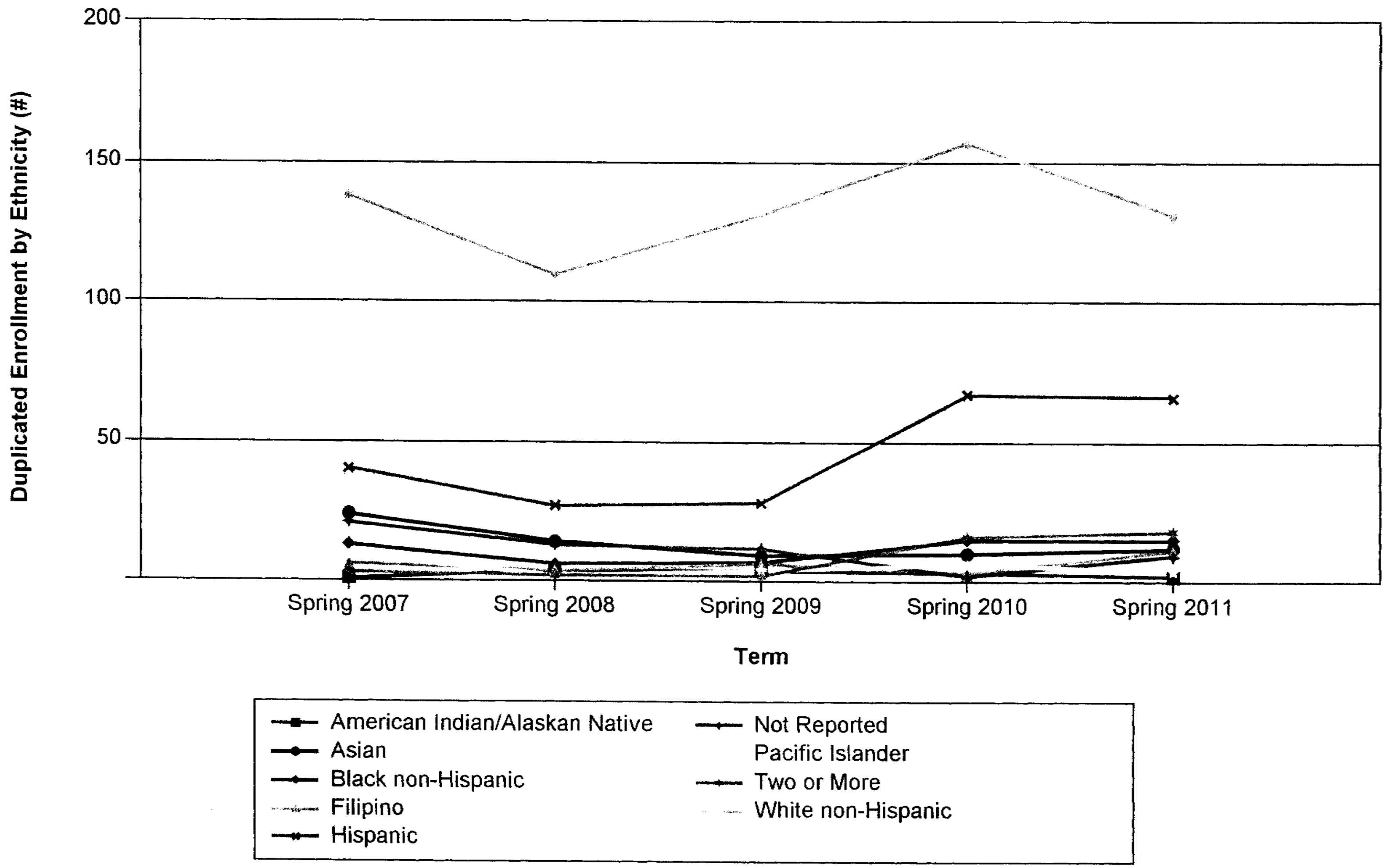
Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Spring 2007		Spring 2008		Spring 2009		Spring 2010		Spring 2011	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	1	0.5 %	4	2.4 %	4	2.2 %		0.0 %	2	0.8 %
Asian	20	9.3 %	12	7.1 %	8	4.4 %	10	3.8 %	10	4.1 %
Black non-Hispanic	12	5.6 %	6	3.6 %	6	3.3 %	14	5.3 %	14	5.7 %
Filipino	5	2.3 %	4	2.4 %	6	3.3 %	3	1.1 %	10	4.1 %
Hispanic	32	14.8 %	24	14.3 %	25	13.9 %	60	22.6 %	61	25.0 %
Not Reported	18	8.3 %	12	7.1 %	11	6.1 %	13	4.9 %	10	4.1 %
Pacific Islander	7	3.2 %	2	1.2 %	4	2.2 %	5	1.9 %	4	1.6 %
Two or More	3	1.4 %	2	1.2 %	2	1.1 %	16	6.0 %	16	6.6 %
White non-Hispanic	118	54.6 %	102	60.7 %	114	63.3 %	144	54.3 %	117	48.0 %
Total	216	100.0 %	168	100.0 %	180	100.0 %	265	100.0 %	244	100.0 %

308

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student ...

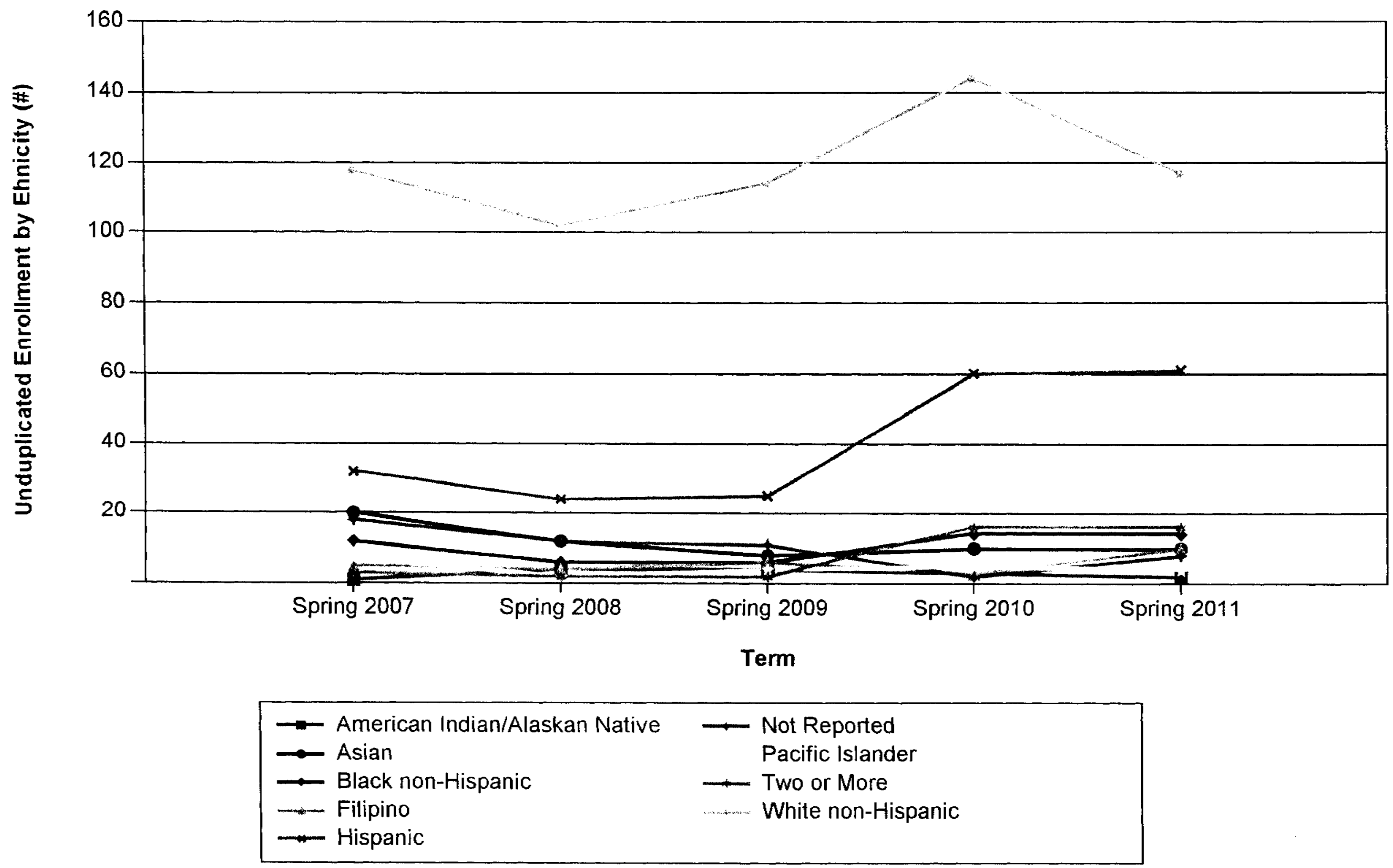
Enrollment by Ethnicity (Duplicated Student Count)



309

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

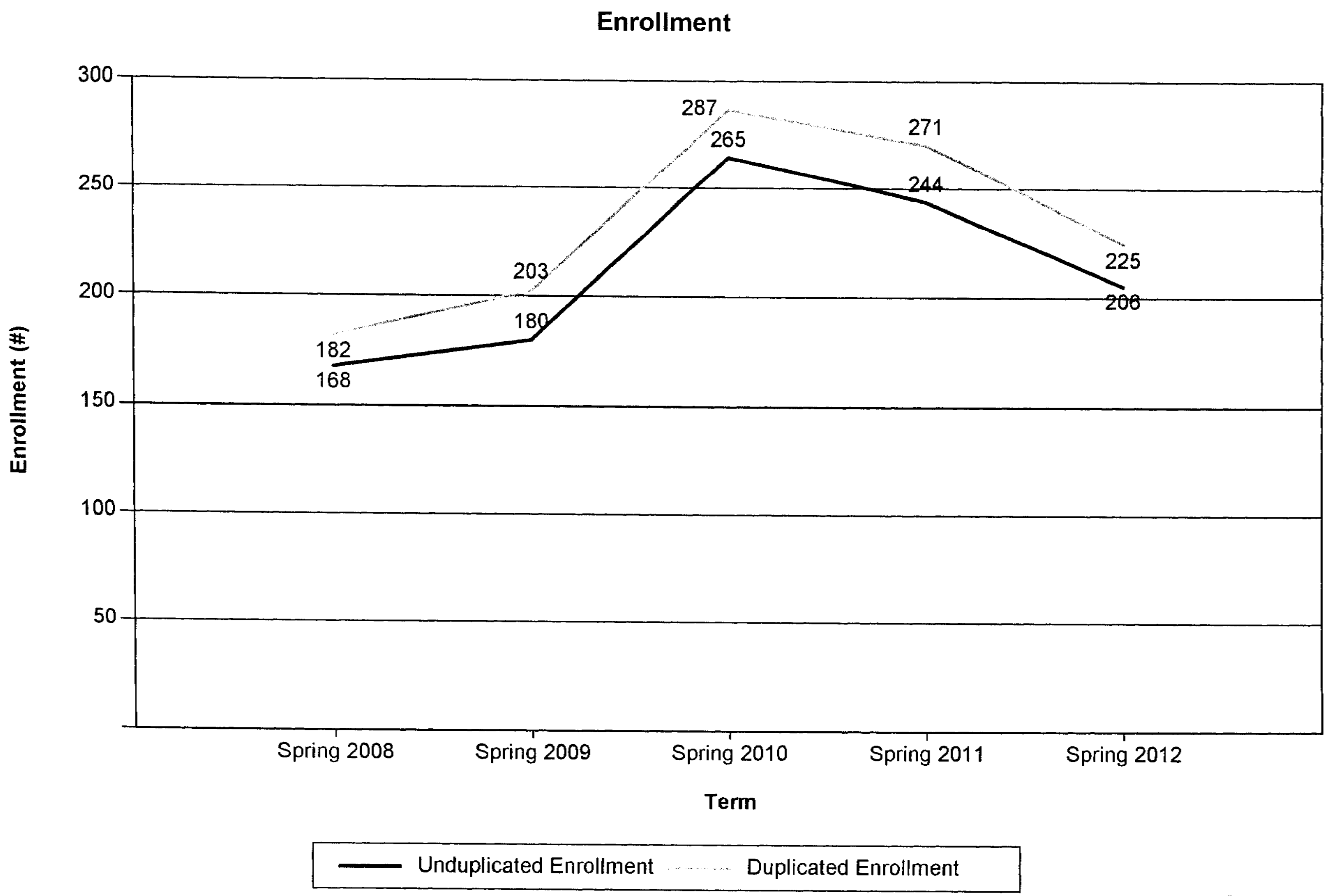
Enrollment by Ethnicity (Unduplicated Student Count)



310

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA



311

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Gender (Duplicated Student Count)

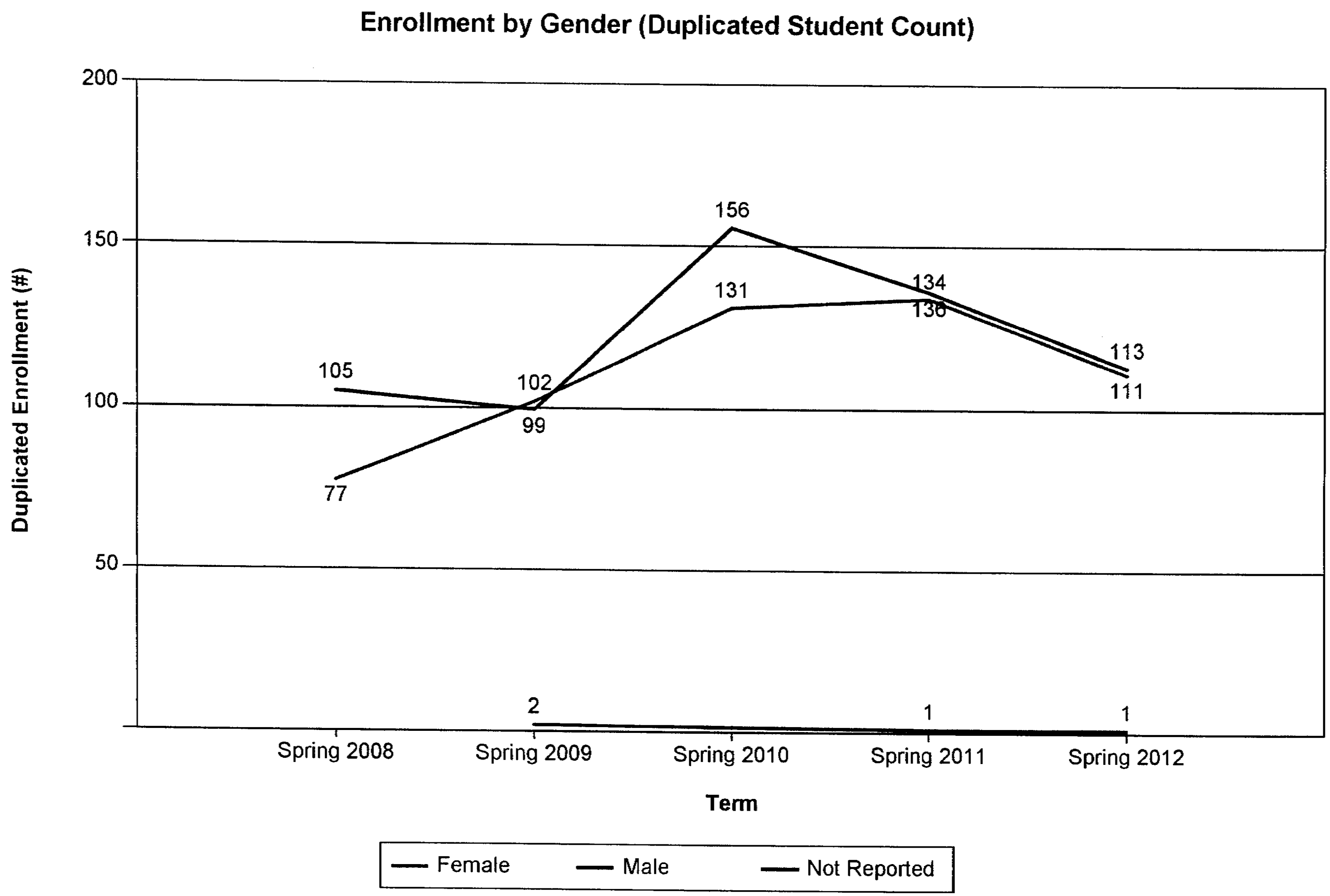
Gender	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
Female	77	42.3 %	102	50.2 %	131	45.6 %	134	49.4 %	111	49.3 %
Male	105	57.7 %	99	48.8 %	156	54.4 %	136	50.2 %	113	50.2 %
Not Reported		0.0 %	2	1.0 %		0.0 %	1	0.4 %	1	0.4 %
Total	182	100.0 %	203	100.0 %	287	100.0 %	271	100.0 %	225	100.0 %

Enrollment by Gender (Unduplicated Student Count)

Gender	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
Female	71	42.3 %	89	49.4 %	123	46.4 %	124	50.8 %	105	51.0 %
Male	97	57.7 %	89	49.4 %	142	53.6 %	119	48.8 %	100	48.5 %
Not Reported		0.0 %	2	1.1 %		0.0 %	1	0.4 %	1	0.5 %
Total	168	100.0 %	180	100.0 %	265	100.0 %	244	100.0 %	206	100.0 %

312

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

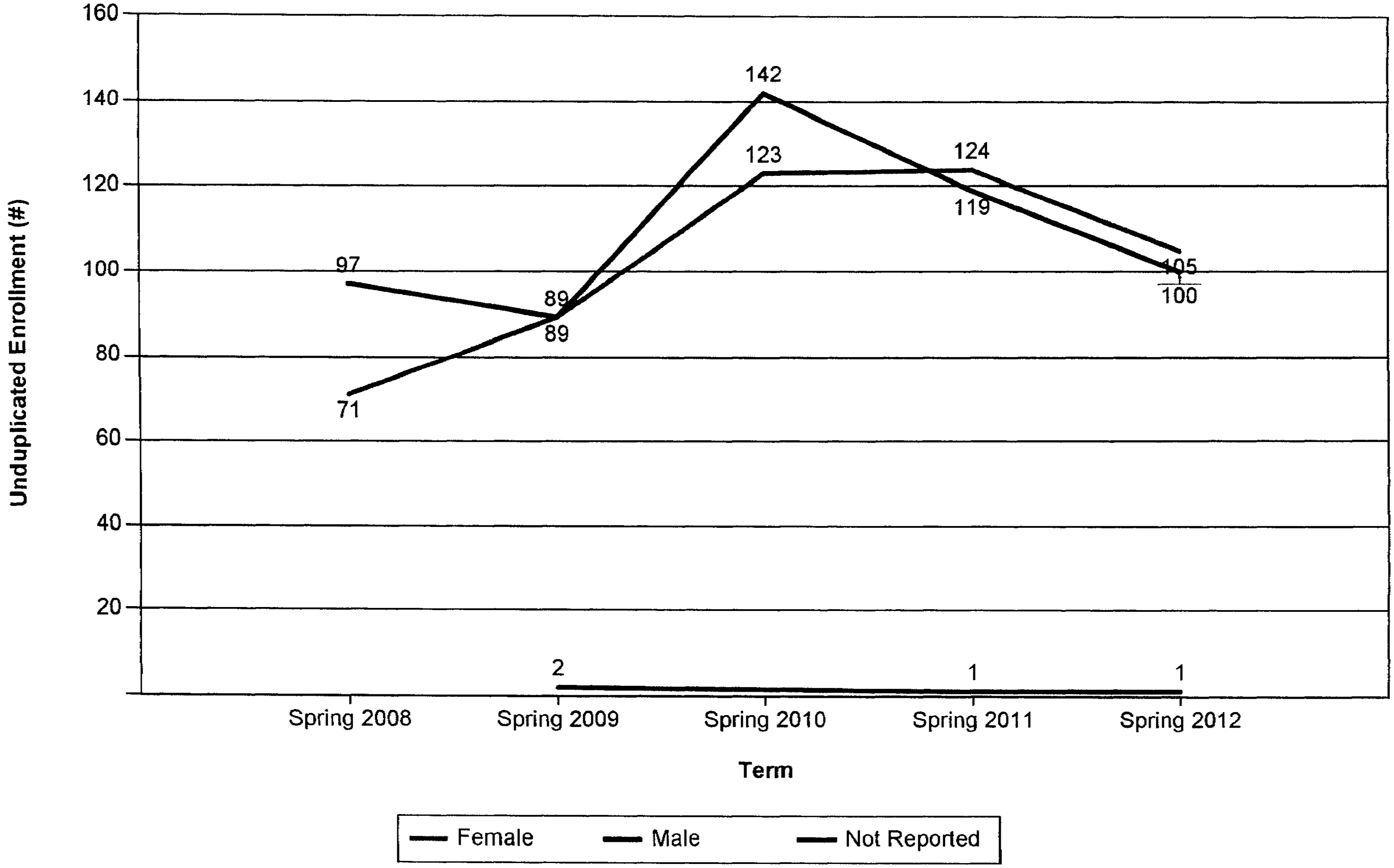


313

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Gender (Unduplicated Student Count)



314

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Age (Duplicated Student Counts)

Age	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
19 or less	80	44.0 %	101	49.8 %	140	48.8 %	115	42.4 %	95	42.2 %
20-24	78	42.9 %	77	37.9 %	105	36.6 %	105	38.7 %	89	39.6 %
25-29	13	7.1 %	15	7.4 %	27	9.4 %	28	10.3 %	12	5.3 %
30-49	5	2.7 %	8	3.9 %	14	4.9 %	20	7.4 %	25	11.1 %
50+	6	3.3 %	2	1.0 %	1	0.3 %	3	1.1 %	4	1.8 %
Total	182	100.0 %	203	100.0 %	287	100.0 %	271	100.0 %	225	100.0 %

Enrollment by Age (Unduplicated Student Count)

Age	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
19 or less	73	43.5 %	91	50.6 %	125	47.2 %	108	44.3 %	89	43.2 %
20-24	72	42.9 %	68	37.8 %	100	37.7 %	95	38.9 %	80	38.8 %
25-29	13	7.7 %	12	6.7 %	27	10.2 %	24	9.8 %	12	5.8 %
30-49	5	3.0 %	7	3.9 %	12	4.5 %	15	6.1 %	22	10.7 %
50+	5	3.0 %	2	1.1 %	1	0.4 %	2	0.8 %	3	1.5 %
Total	168	100.0 %	180	100.0 %	265	100.0 %	244	100.0 %	206	100.0 %

315

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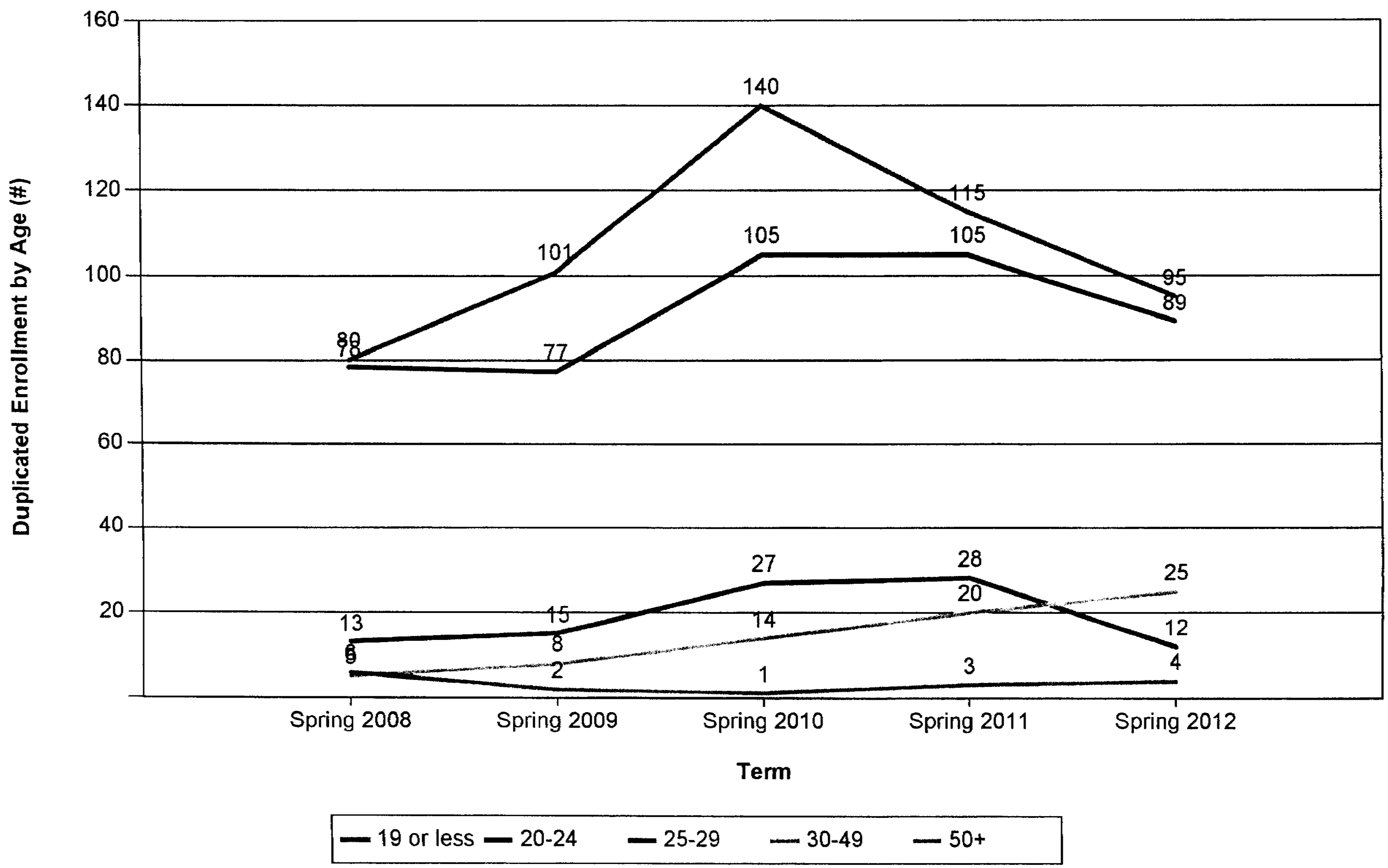
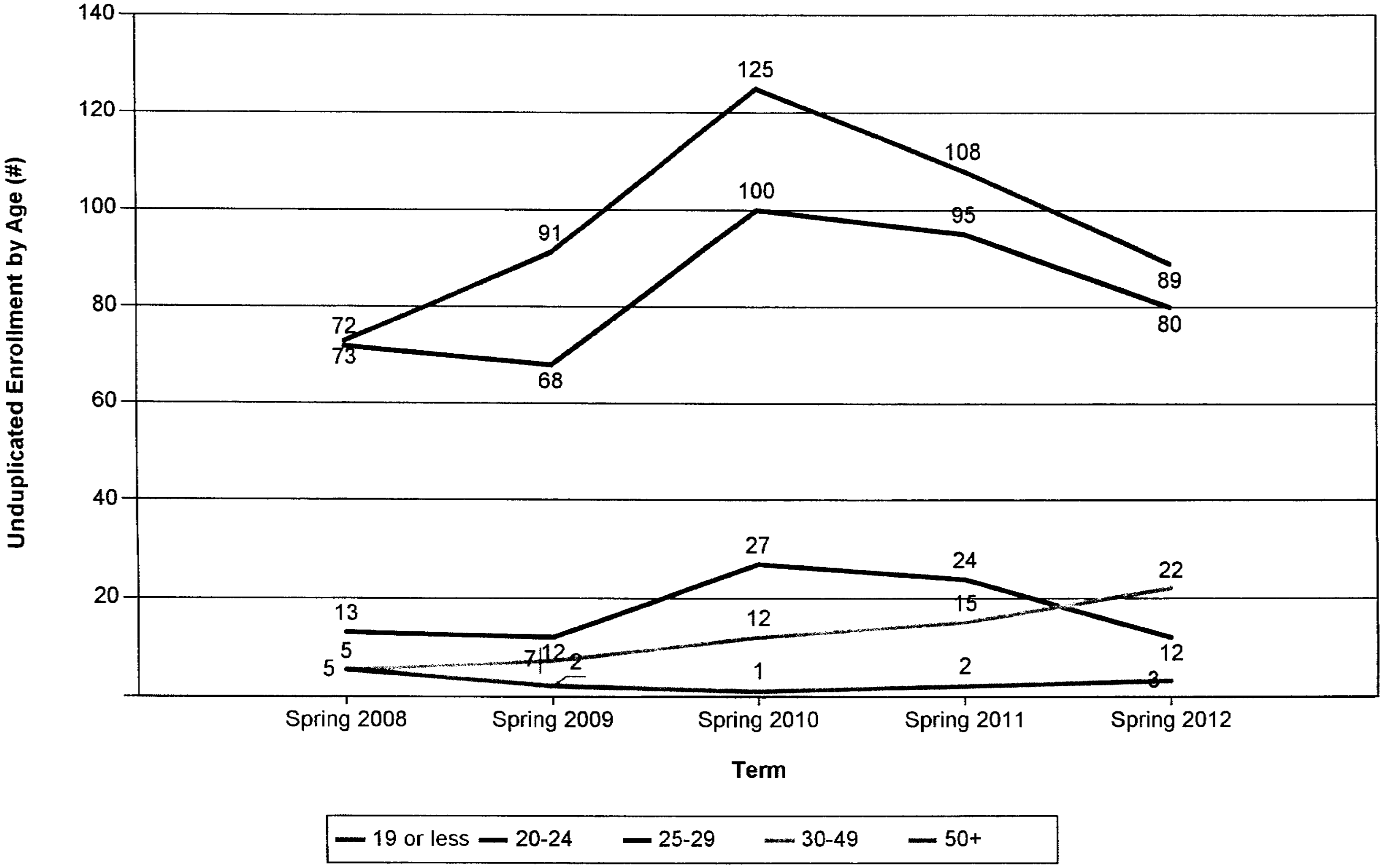
Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Age (Duplicated Student Count)



316

Enrollment by Age (Unduplicated Student Count)



317

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Grossmont College Enrollment
OCEA

Enrollment by Ethnicity (Duplicated Student Counts)

Ethnicity	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	4	2.2 %	4	2.0 %		0.0 %	2	0.7 %		0.0 %
Asian	14	7.7 %	9	4.4 %	10	3.5 %	12	4.4 %	9	4.0 %
Black non-Hispanic	6	3.3 %	7	3.4 %	15	5.2 %	15	5.5 %	9	4.0 %
Filipino	3	1.6 %	6	3.0 %	3	1.0 %	11	4.1 %	7	3.1 %
Hispanic	27	14.8 %	28	13.8 %	67	23.3 %	67	24.7 %	65	28.9 %
Not Reported	13	7.1 %	12	5.9 %	13	4.5 %	10	3.7 %	9	4.0 %
Pacific Islander	2	1.1 %	4	2.0 %	6	2.1 %	4	1.5 %	1	0.4 %
Two or More	3	1.6 %	2	1.0 %	17	5.9 %	18	6.6 %	15	6.7 %
White non-Hispanic	110	60.4 %	131	64.5 %	156	54.4 %	132	48.7 %	110	48.9 %
Total	182	100.0 %	203	100.0 %	287	100.0 %	271	100.0 %	225	100.0 %

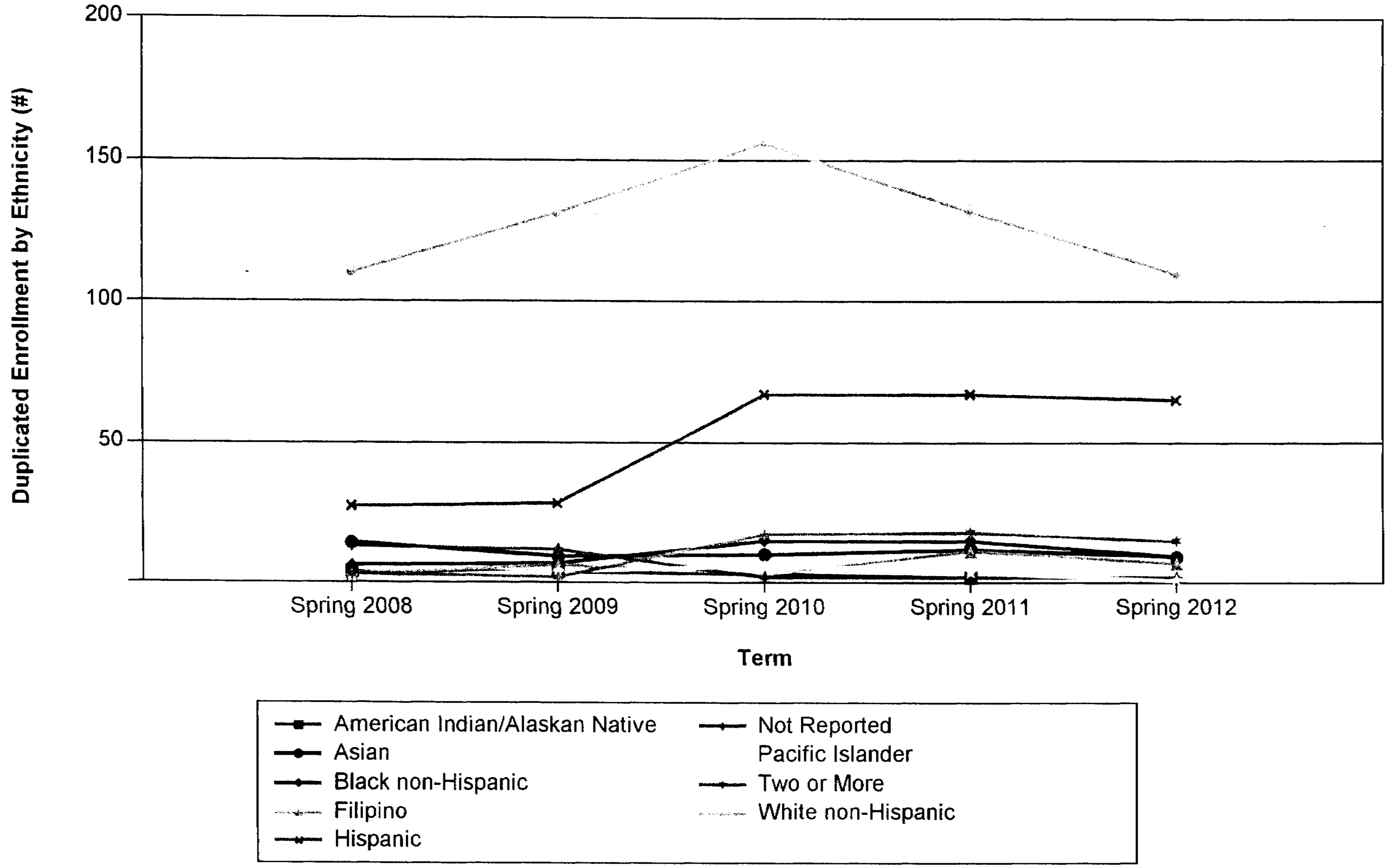
Enrollment by Ethnicity (Unduplicated Student Counts)

Ethnicity	Spring 2008		Spring 2009		Spring 2010		Spring 2011		Spring 2012	
	n	%	n	%	n	%	n	%	n	%
American Indian/Alaskan Native	4	2.4 %	4	2.2 %		0.0 %	2	0.8 %		0.0 %
Asian	12	7.1 %	8	4.4 %	10	3.8 %	10	4.1 %	8	3.9 %
Black non-Hispanic	6	3.6 %	6	3.3 %	14	5.3 %	14	5.7 %	8	3.9 %
Filipino	3	1.8 %	6	3.3 %	3	1.1 %	10	4.1 %	5	2.4 %
Hispanic	24	14.3 %	25	13.9 %	60	22.6 %	62	25.4 %	62	30.1 %
Not Reported	12	7.1 %	11	6.1 %	13	4.9 %	8	3.3 %	8	3.9 %
Pacific Islander	2	1.2 %	4	2.2 %	5	1.9 %	4	1.6 %	1	0.5 %
Two or More	3	1.8 %	2	1.1 %	17	6.4 %	16	6.6 %	13	6.3 %
White non-Hispanic	102	60.7 %	114	63.3 %	143	54.0 %	118	48.4 %	101	49.0 %
Total	168	100.0 %	180	100.0 %	265	100.0 %	244	100.0 %	206	100.0 %

318

Duplicated headcount represents seat count.
Unduplicated headcount represents distinct student headcount.

Enrollment by Ethnicity (Duplicated Student Count)



319

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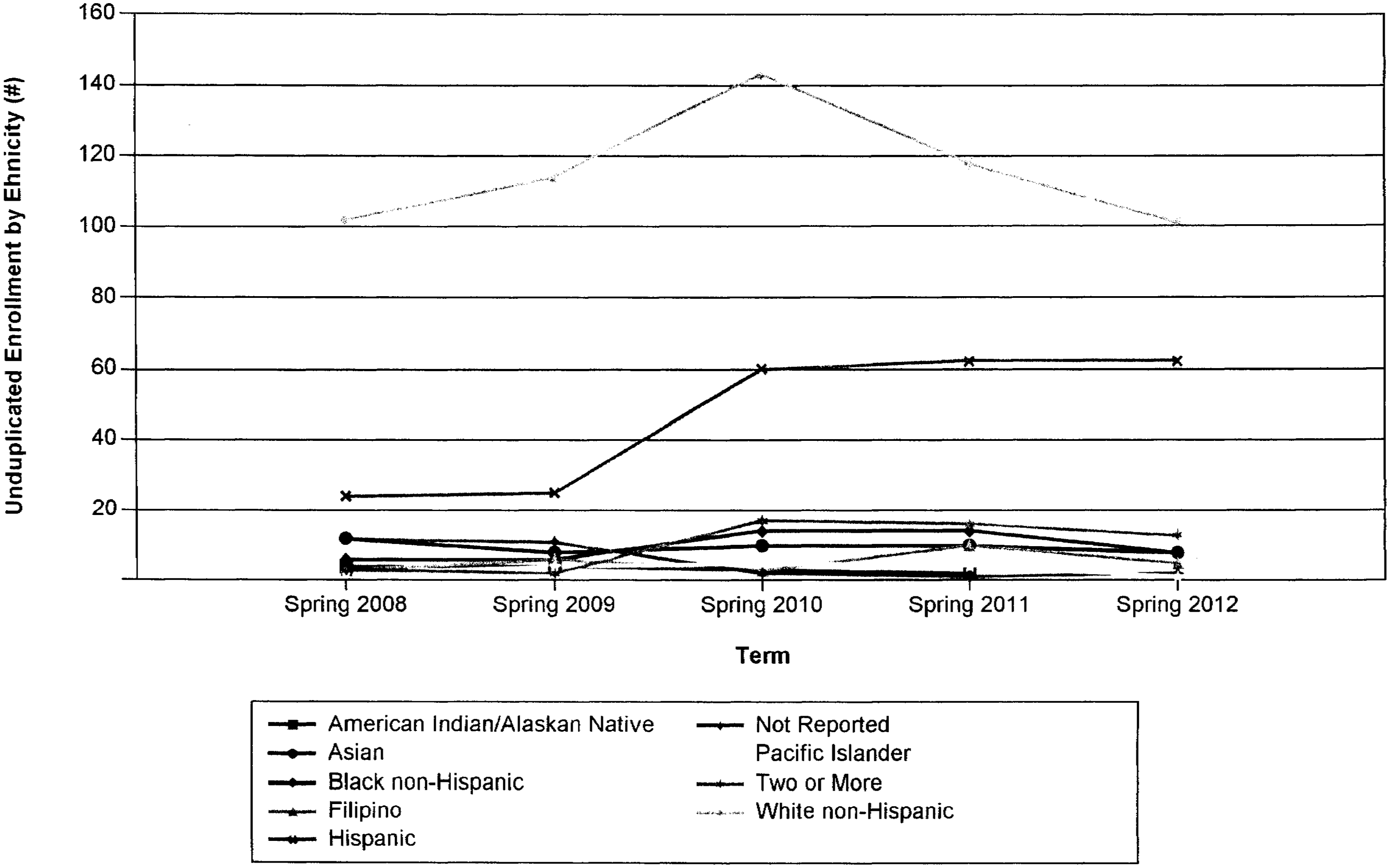
Grossmont College Enrollment
OCEA

Enrollment by Ethnicity (Unduplicated Student Count)



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APPENDIX 14 –

FISCAL YEAR FTES ANALYSIS BY PROGRAM REPORT

Geography (220600)	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/1·
Course #								
GEOG 104								
GEOG 106								
GEOG 120								
GEOG 121								
GEOG 130								
GEOG 140								
GEOG 170								
GEOG 180								
GEOG 199								
WSCH/FTES								
Summer- WSCH	375.00	357.00	285.00	159.00	264.00	252.00	363.00	0.00
Fall- WSCH	2,448.00	2,334.00	1,686.00	1,713.00	1,728.00	1,833.00	2,358.00	2,520.00
Spring- WSCH	2,127.00	2,193.00	1,878.00	1,884.00	1,957.00	2,107.00	2,671.00	2,456.00
Total WSCH	4,950.00	4,884.00	3,849.00	3,756.00	3,949.00	4,192.00	5,392.00	4,976.00
Total FTES	165.00	162.80	128.30	125.20	131.63	139.73	179.73	165.87
Unrestricted General Fund Cost	363,850	339,358	294,596	294,475	299,909	487,682	535,225	533,878
Costs per FTES	2,205.15	2,084.51	2,296.15	2,352.04	2,278.42	3,490.17	2,977.94	3,218.65
Restricted General Fund Cost (Grants, Categorical funds)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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GCCCD
Grossmont College Program Review
Program Data Elements

Geology (191400)	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/1
Course #								
GEOL 104								
GEOL 110								
GEOL 111								
GEOL 121								
GEOL 150								
GEOL 150								
GEOL 161A								
GEOL 162								
GEOL 163								
GEOL 164								
GEOL 165								
GEOL 172								
GEOL 173								
GEOL 176								
GEOL 210								
GEOL 220								
GEOL 230								
GEOL 299								
WSCH/FTES								
Summer- WSCH	0.00	0.00	0.00	100.00	95.00	181.00	85.00	0.00
Fall- WSCH	735.00	663.63	807.86	759.00	839.00	740.00	1,029.00	1,074.00
Spring- WSCH	901.00	810.00	870.00	668.63	971.00	887.00	1,099.00	957.00
Total WSCH	1,636.00	1,473.63	1,677.86	1,527.63	1,905.00	1,808.00	2,213.00	2,031.00
Total FTES	54.53	49.12	55.93	50.92	63.50	60.27	73.77	67.70
Unrestricted General Fund Cost	126,558	168,515	189,062	214,420	217,001	343,285	174,610	108,273
Costs per FTES	2,320.89	3,430.68	3,380.33	4,210.92	3,417.34	5,695.79	2,366.95	1,599.31
Restricted General Fund Cost (Grants, Categorical funds)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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GCCCD
Grossmont College Program Review
Program Data Elements

Oceanography (191900)	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11
Course #								
OCEA 112								
OCEA 113								
OCEA 113								
OCEA 199								
WSCH/FTES								
Summer- WSCH	105.00	96.00	38.00	129.00	75.00	51.00	84.00	0.00
Fall- WSCH	687.00	639.00	699.00	639.00	663.00	693.00	732.00	543.00
Spring- WSCH	628.50	699.00	723.00	762.00	528.00	594.00	849.00	801.00
Total WSCH	1,420.50	1,434.00	1,460.00	1,530.00	1,266.00	1,338.00	1,665.00	1,344.00
Total FTES	47.35	47.80	48.67	51.00	42.20	44.60	55.50	44.80
Unrestricted General Fund Cost	71,374	83,022	76,485	91,831	104,657	85,010	76,672	53,047
Costs per FTES	1,507.37	1,736.86	1,571.50	1,800.61	2,480.02	1,906.05	1,381.48	1,184.08
Restricted General Fund Cost (Grants, Categorical funds)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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APPENDIX 15 –

FISCAL DTA: OUTCOMES PROFILE

Fiscal Data Outcomes Profile

GEOGRAPHY												
Semester/Year	2006FA	2007SP	2007FA	2008SP	2008FA	2009SP	2009FA	2010SP	2010FA	2011SP	2011FA	2012SP
Enrollment	575	632	579	660	611	693	790	861	844	802	809	766
Earned WSCH/FTEF	444.93	461.84	473.42	479.3	482.37	491.94	612.47	663.36	690.41	624.46	691.71	645.27
Total FTES		125.2		131.63		139.63		179.73		165.87		
Cost/FTES		2,352.04		2,278.42		3,490.17		2,977.94		3,219		
Total Cost/Fiscal Year		294,475.00		299,909.00		487,682		535,225		533.878		
Total Revenue		516,199.60		600,868.57		637,387.21		820,436.90		757,168.35		
Other Revenue												
GEOLOGY												
Semester/Year	2006FA	2007SP	2007FA	2008SP	2008FA	2009SP	2009FA	2010SP	2010FA	2011SP	2011FA	2012SP
Enrollment	253	226	291	289	259	270	359	318	363	328	324	277
Earned WSCH/FTEF	399.47	408	426.53	420	376.21	406.28	582.34	570	692.9	617.42	681.05	543.94
Total FTES		50.92		63.5		60.27		73.77		67.7		
Cost/FTES		4,210.92		3,417.34		5,695.79		2,366.95		1,599.31		
Total Cost/Fiscal Year		214,420		217,001		343,285		174,610		108,273		
Total Revenue		209,943.16		289,814.00		275,122.30		336,747.50		309,038.99		
Other Revenue												
OCEANOGRAPHY												
Semester/Year	2006FA	2007SP	2007FA	2008SP	2008FA	2009SP	2009FA	2010SP	2010FA	2011SP	2011FA	2012SP
Enrollment	213	255	224	182	231	203	245	287	182	270	242	225
Earned WSCH/FTEF	473.33	472	491.11	391.11	513.33	516.52	636.52	628.89	724	593.33	764.21	704.21
Total FTES		51		42.2		44.6		55.5		44.8		
Cost/FTES		1,800.61		2,480.02		1,906.05		1,381.48		1,184.08		
Total Cost/Fiscal Year		91,831		104,657		85,010		76,672		53,047		
Total Revenue		210,273		192,635.83		203,591.42		336,747.50		204,504.38		
Other Revenue												

APPENDIX 16 –

EARTH SCIENCE LAB TECH DOCUMENTATION

GROSSMONT COLLEGE
Planning & Resources Council

Thursday, November 20, 2008
Griffin Gate
3:00 to 5:00 p.m. ← Position Approved (see last page)

MEETING SUMMARY
Open Meeting

Present: Fred Allen, Jerry Buckley, Janet Castanos, Carrie Clay, John Colson, Jim Fenningham, Kats Gustafson, Chris Hill, William Felty (ASGC), Tim Flood, Anita Martinez, Danny Martinez (for Zoe Close), Dave McDade, Jane Nolan, Alba Orr, Roger Owens, Shirley Pereira, Tina Pitt, Brad Tiffany, Adelle Schmitt, Jim Spillers, Lynette Wilson, Jim Wilsterman

Absent: Pam Amor, Zoe Close, Sunny Cooke, Veronica Powell, Marsha Raybourn, Mary Rider, William Snead, Paul Vincent

Guest: Debbie Yaddow

Recorder: Patty Sparks

Meeting Convened: 3:05 p.m.

I. Approval of Planning & Budget Meeting Notes, October 23, 2008
Shirley asked the Council if there are changes or edits to the October 23, Meeting Summary. Kats Gustafson stated the last sentence in the summary is missing. Patty will make the correction and send updated Summary to Council via email. Lynette Wilson stated she attended the October meeting and her name is missing on Summary.

II. Scan Teams Update
Chris Hill provided a handout, *Taxonomy Change Areas and Information Descriptors*, for the Council to review. She stated that the handout represents the four areas of focus for the Scan Teams. The areas of focus are 1) Political and Economic, 2) Technology, Media and Communication, 3) Education and Competition, and 4) Transportation and Energy. The Scan Teams will consider social and lifestyle values that impact all of the focus areas. The Scan Teams already met once and will meet again on Tuesday, November 25. The Scan Teams members include faculty members from various areas and some administrators have expressed interest in the process. The Scan Teams will have four to five members that consist of one administrator, one classified, and the rest faculty. Shirley asked if Institutional Research and Planning is involved. Chris responded that this process is not data driven and literally, the Scan Teams are responsible for learning as much as they can in these particular areas through all media means.

No action taken.

III. Budget Status/Update
LAO Update
Tim provided a handout, *Community College League of California, Budget Update #23: November 11, 2008,* for the Council to review. The Legislative Analyst's Office (LAO) recommends the following: eliminating the .68% COLA; No 5% cut to the general apportionment; increasing fees to $26 per unit on January 1 and to $30 on July 1, 2009; reducing funding to the regular noncredit rate for "certain credit-bearing physical education classes effective January 1, and additional enrichment courses such as ballroom dancing, drawing and photography, effective July 1, 2009.

Upon full implementation, the reduction in reimbursement rates would cut community college funding by $200 million in 2009/10. Community Colleges statewide would not be able to keep the $120 million in increased fees and further reported that the District is planning for a 5% reduction. We are looking at a possible $5.1 and $5.5 million reduction. There are on-going discussions at the State level and nothing has been set in stone. He reminded the Council that the District did set aside $2.75 million anticipating a mid-year reduction. Tim assured the Council that he will keep them informed as to updates once decisions have been made at the State level.

Hourly Budget Update – Overview

Tim provided handouts as follows: *Grossmont College Hourly Admin, Counselors, Librarians Summary FY 07-09 with Projections; Hourly Admin, Counselors, Librarians Summary Budget Projections/Actual Fiscal Year 2008-09; Hourly Admin, Counselors, Librarians Budget Projections/Actuals Fiscal Year 2007-08; Grossmont College 1300's Hourly/Overload Analysis Summary FY 07-09 with Projections; Grossmont College 1300s FY 2008-09,* for the Council to review.

Tim reminded the Council that at the last meeting there was discussion regarding the $1 million that was moved from unallocated funding into personnel accounts. Further, that amount includes the $400,000 Board Commitment. He explained that after reviewing hourly budgets, he prepared spreadsheets that include actual monthly allocations and projections based on increases to hourly pay scales. Tim referred the Council to handout, *1300s Hourly/Overload Analysis Summary FY 07-09 with Projections*, and stated that $500,000 was placed in the 1300 accounts. To date if projections are correct, there would be a $423,236 balance remaining. He reported that the analysis is based on the same number of sections offered last spring.

Tina Pitt stated that she sent an email asking Chairs and Coordinators to review sections and not run any sections under 15 students. Currently, we are at 45 sections over as to funding. We need work those 45 sections down, and if possible more than the 45 sections. Further she asked for justification from Chairs and Coordinators for classes requested to run under 15 students.

Tim reported that he is providing as much information as possible and we know there is limited funding for sections. When we look at sections we must ensure the best benefit for students. As far as the 15 student cap, some classes can only take 12 students and these will be considered. Chris Hill stated that there are some sections that are held once every year and/or every other year and students will need them for their degree.

Shirley requested that if sections are cut in spring, we need to have ample time to inform students, and further stated there are some classes that don't fill until late in the enrollment process. Brad Tiffany would like clarification on what percentage of growth we are responsible for obtaining. Tim reminded the Council that we are bringing ROP into FTES generated sections and we will see an increase there, but will get the actual number to Brad as soon as possible. Chris Hill asked if there is a way to obtain the percentage of enrollment two weeks into the enrollment process. Jim Wilsterman stated that because San Diego State is on a different timeframe than us, we see a peak of student enrollment once San Diego State closes sections.

Action taken: Tim to provide Brad Tiffany the actual percentage of growth to obtain.

Overview of Strategies 08/09 mid-year cut

Tim stated that we need to know what the benchmark growth is so we don't go over or under. He further reminded the Council that the growth funding is not set in stone, and we may not receive that State funding. We are taking a look at where we are going to find savings campus wide by looking at how we can consolidate sections, as well as look at salary savings and the $400,000 Board Commitment. Tim briefly discussed costs for postage and printing services college wide. He is asking that departments look at their printing and postage usage as that fund has been cut. We are now operating with an unhealthy budget and further stated at the last Governing Board Meeting it was discussed that some services be combined to save funds. If there are any suggestions as to cost savings and/or revenue generating ideas to please forward them to him. Fred Allen suggested that a retirement incentive be offered as replacement salaries cost less.

Tim stated that the priorities discussed during the last reduction scenario process was to keep cuts as far away from students as possible, reach growth, and protect positions. Depending on what the 2008/09 mid-year cut will be, these priorities will conflict with one another.

No action taken.

Block Grants

Tim stated that there is some good news as to Block Grants. The ETC Funds are approximately $137,000 and reminded the Council that some of those funds will be set aside for the new planning process and the other portion to library materials. We did receive one-time funds for Facilities Repairs at approximately $103,000. He is asking that a portion of that funding, as recommended by Facilities Committee, to be applied to the pool replacement. The Facilities Committee further recommended to fund sidewalk repair and replacement (ADA required). He stated that because we already have construction funding for the Student Center/Student Services building we will meet our match obligation. Tim asked the Council to move forward with the Facilities Committee recommendations as stated. The Council agreed to the following: transition a portion of ETC funds for the new Planning Process; move forward with the Facilities Committee recommendations.

Action taken: The Council agreed to transition a portion of the ETC funds for the new Planning Process; move forward with the Facilities Committee recommendations as discussed.

IV. Postage, Printing, and other General Use Budgets

Alba Orr provided a handout, *GCCCD Postage Tracking Grossmont College*, for the Council to review. Alba stated that this is a two year report and is requesting that if anyone is planning on doing a large mass mailing, to please call and/or see her first. Further she is asking for all data bases to be updated as the returns are costly. The bolded amounts on the handout are areas where costs are high. She further explained that Admissions and Records have high costs, but those are from appointment letters and they are required. Tim stated we have already spent $52,761.39, and last year's total for the year was just over $72,000. When returns come back to the mailroom – the cost can easily add up to a $1 per item. The distribution lists must be updated to avoid these additional costs. Tim further reported that a reminder will be sent out via email with helpful hints and mailroom facts. Alba stated that she will work with all departments and help them to best serve the college and the community.

Action taken: Tim will send an email with mailroom facts and helpful hints college wide.

V. Facility Use Fee & AP Changes

Fee Schedule

Tim provided a handout, *GCCCD Facility Use Fees*, for the Council to review. He explained that facility requests for use of facilities was up and further found that we were under the current going rate for rental fees. The fees were updated prior to advertising our facilities. In addition, we require that request to use our facilities are limited to four dates only, any more than that another facility request. Direct costs for internal groups will be reviewed with each request to determine what the actual amount will be.

AP Changes

Tim provided a handout, *AP 6700 – Civic Center and Other Facilities Use*, for the Council to review. This AP was approved by the Governing Board at the November meeting.

Campus Gates

Tim stated that the District is suggesting that the Grossmont and Cuyamaca Campuses close between 11 p.m. to 5 a.m. every day. He further stated that there is an increase in theft and custodians witness large numbers of people collecting cans and removing recyclables. Having a closed campus allows us to ask people to leave the campus and the ability to enforce it. Public Safety Officers are present on campus twenty-four hours a day and will have keys to open gates. The gates will be located north of the transit center, the bookstore ramp, and at the light just passed Hanson Circle.

Employees parked in Parking lot 7 and the staff parking by the transit center can access their car and leave the campus at anytime. Exact locations of the gate will be submitted to this Council and via email.

No action taken.

VI. Committee Reports

Report from Faculty Staffing

Jim Fenningham provided a handout, *Faculty Staffing committee (Fa03-Sp04-Su04) Faculty Staffing Priority List*, for the Council to review. He reported that a Diana Puleo is resigning mid-tenure. When this happens the Staffing Committee revives the original list. The Faculty Staffing Committee discussed the two new nursing positions that this Council discussed at the last Planning & Resources Council meeting, however no recommendations were made by the Committee. The plan was to roll-over the 07/08 Faculty Staffing list, and augment it with one retirement position and one resignation. The nursing situation forces us to revisit and review two new nursing positions, however to be fair the list should open to all departments. The Faculty Staffing Committee for now is recommending to this Council to fill the Diana Puleo nursing position. Jim explained that the two new nursing positions have complicated the process and the Faculty Staffing Committee will meet again to discuss and make recommendations.

Action taken: Faculty Staffing recommends to replace the Diana Puleo nursing position. Council agreed.

Report from Classified Staffing

Jim reported that at the last Classified Staffing Committee meeting it was discussed on how to spend the $100,000 Board Commitment, if directed. He provided a handout, *Classified Staffing Committee Final Ranking – Spring 2008*, for the Council to review. The top three positions are: 1) Student Services Specialist/Student Affairs; 2) AOJ Clerical Assistant; and 3) Earth Science/Chemistry Lab Technician. Position 1 and 2 are full time and 3 is a half-time position. Jim verified that this is the Spring 08 list and applies to the Board Commitment for 2008. The 2007 list is still active, however there is no funding to fill these positions. Those positions will open once funding becomes available.

Meeting adjourned at 4:36 p.m.

* EARTH SCIENCE LAB TECH

Classified Staffing Committee

Classified Staffing Committee Final Ranking - Spring 2008

Ranking	*Department*	*Cost*
1	Student Services Specialist/Student Affairs	$45,709
2	AOJ - Clerical Assistant	$22,971
3	Earth Science/Chemistry Lab Technician	$26,485
	TOTAL	$95,165
4	Digital Arts Electronics Computer Technician	
5	Humanities and Social/Behavioral Science Clerical Assistant	
6	ESL Clerical Assistant	
7	Dance, Music, Theatre Arts - Accompanist	
8	Physics, Astronomy & Physical Science Technician	
9	Dance Operations Facilitator	
10	Music Dept. Administrative Assistant	
11	Foreign Language Clerical Assistant	

Justification for the Earth Science Lab Technician

The department of Earth Sciences is the only science department without a lab technician. For the last 15 years, we have placed the position high on our list of department goals, yet despite the inclusion of the need in past program review documents (see the attached section from the 2005 department program review), the recommendations of two Program Review Committees, and the position's approval by the Planning and Resources Council (P&RC), the position remains unstaffed due to insufficient funding. Although allocations of discretionary release time to lab coordinators have helped somewhat in the last two years, the 20% release time granted falls well short of the required 50% position recommended by the Classified Staffing Committee (see the attached minutes from P&RC, November 2008). This situation, which is both inequitable with respect to working conditions and pedagogically sub-optimal, has existed since the department's beginnings and now, after 50 years of accumulated neglect, a *critical threshold has been reached which threatens our educational services.*

The following is a summary of the changes which have taken place in the Earth Sciences which justify the critical need to hire an Earth Science Lab Technician:

- Years ago (20+), there were fewer earth science labs and they were mostly map/paper/pencil type labs for which there was little need for a tech. For labs which involved rock and mineral specimens, we had an informal agreement that chemistry and physics techs would help us curate the specimens but frankly, they provided limited help because they lacked the necessary training in the earth sciences. About the only thing they were able to help with is painting numbers on specimens, and that was only when they did not have any immediate responsibilities to their respective departments. Nowadays the chemistry and physics techs are pretty much always busy, so we have given up asking for their help.
- Over the years, the department has acquired (through donations, purchases, and field collection) an increasingly huge collection of rocks, minerals, fossils, and maps which now require far more time to curate and maintain.
- About ten years ago, our department began moving away from pen and pencil labs towards more pedagogically engaging, hands-on labs involving data collection and analysis. Such labs rely on settling up and maintaining equipment (something that lab technicians do in other departments). Furthermore, every time we get a new adjunct instructor, a full time instructor must train the adjunct in the proper set-up, use and maintenance of the lab equipment.
- Beginning in the spring of 2001 we began offering field courses with an increasing emphasis on using technology to collect and analyze field data. Our field component has grown markedly in both the number of sections offered and the amount of equipment required (GPS receivers, thermal infrared sensors, YSI salinity/dissolved oxygen/ temperature probes, sampling devices, compasses, refractometers, 2m FM radios, etc.). Our field classes are far more academically engaging now, but we are finding it difficult to keep up with equipment maintenance and set-up issues.
- With the increasing amount of technical equipment being used in the lab and field courses, we are experiencing an ever greater need for someone to oversee the checkout of equipment.
- Starting in the fall of 2003, our department began offering Oceanography labs with much the same equipment set-up/tear down/maintenance issues as our other labs and field courses.
- The completion of the new science building included a weather station and seismograph, the monitoring and maintenance of which places additional demands on instructor time.
- The debris of 50 years of accumulated neglect is beginning to seriously affect our efficiency.

The duties of the Earth Science Lab Technician are thoroughly detailed in attached matrix. Nearly all of these duties require formal training in the earth sciences and therefore cannot be performed by intermittent hourly workers.

WEEK	GEOGRAPHY (2-3 Sections)	GEOLOGY* (1or 2 Sections)	OCEANOGRAPHY (1 or 2 Sections)	#
1	Lab #1: Get 25 calculators from math lab for week #1, check batteries in each, replace when necessary, stock lab with equipment checkout cards, nametags, duplicate and stock handouts for lab #1. Do a complete inventory check to verify that all geography lab equipment is accounted for, cleaned, functioning, and stored in proper place. Calibrate all compasses to correct declination. Return calculators to math lab.	MINERALS – Check to see that all 42 mineral specimens are in each of the 16 student collections. Replace, reorder and/or re-label as necessary. Curate the collection of bulk specimens (students tend to mix them up so specimens must be put back where they belong). Order and/or replace used testing equipment. Fill acid bottles. Select, label and set-up practice and for-credit mineral exams.	Order supplies (dissolved oxygen test kits, plate maps, replacement equipment)	Maintain and monitor seismograph and weather station. Order, maintain, outfit, put-away field equipment.
2	Lab #2: Setup for lab #2 includes preparing laminated La Mesa topo quads for use (clean, discard damaged, and order new replacements), setup of globes, and check-in/check-out of compasses and tape measures with students. Duplicate and stock handouts for lab #2. Clean maps after each lab session, and store globes at end of week.		Field Lab – Lake Murray Maintain, prepare and clean-up testing equipment.	
3	Lab #3: GPS servicing and prep. Check all GPS units for proper operation and connectivity with satellites, contact manufacturer to send malfunctioning units out for service, package and ship units for service. Replace batteries when necessary, delete waypoints, and adjust to proper format (NAD83, Lat/Long in deg/min/sec, units, etc). Clean face of GPS unit and case, check wrist straps and order replacements. Duplicate and stock handouts for lab #3.		Order supplies.	
4	Lab #4: Setup for lab #4 includes posting compass bearing exercise targets throughout the lab and in key locations outside of the new science buildings. Place corresponding masking tape on floor, write compass bearing letter on tape. Check in/out compasses with students and check declination, adjust when necessary. Duplicate and stock handouts for lab #4.	ROCKS– Check to see that all 45 rock specimens are in each of the 16 student collections. Replace, reorder and/or re-label as necessary. Curate the collection of bulk specimens (students tend to mix them up so specimens must be put back where they belong). Order and/or replace used testing equipment. Fill acid bottles. Select, label and set-up practice and for-credit rock exams.	Set up and take down ocean sediment samples and analysis equipment.	
5	Lab #5: Setup for lab #5 includes locating bearing points for compass traverse exercise in main quad of campus using a compass and 50' tape measure and marking those locations with tape. Before each lab sections, cones need to be set up and removed at each bearing point in the quad. Assist instructors with transporting and distributing compasses and traverse exercises in quad. In addition, a considerable amount of setup is required for the principle of continentality and albedo experiments. Check thermometers and order replacements if damaged/malfunctioning, setup clamps, affixing thermometers to clamps and albedo cans, setup heat lamps, silver and black cans, beakers with 100 ml of sand and 100 ml of water. Check heat lamps and replace bulbs and or order new bulbs when necessary. Obtain samples of Brittlebush and California Sunflower from local area to be used during the lab. Take down all equipment at end of week. Duplicate and stock handouts for lab #5. Clean and store all equipment at end of week and re-calibrate compass declination.		Collect, set up and take down water samples and water testing equipment.	
6	Lab #6: Setup for lab #6 includes printing and laminating plant ID cards, placing ID cards at 6 waypoints across campus, mark each waypoint with masking tape, purchase candy and place in container at waypoint "E" before each lab section. Place red flag on slope at waypoint "F". Check all waypoints for environmental changes to insure that the waypoint is still usable. Notify and assist instructors in finding suitable substitute waypoints when necessary. Assist instructors in transporting and checking in/out the compasses and GPS units in the main quad of campus for each lab section. Assist instructors in proctoring GPS component of lab #6 to promote student safety while navigating around campus in a variety of environmental conditions as well as to promote academic integrity. Obtain real-time surface pressure distribution from internet during each lab section and record data on transparency for display during lab. Post-lab GPS maintenance including cleaning, calibrate, delete waypoints, check format and operation, inventory, check and replace batteries, and re-stock. Check compass declination and adjust as needed. Take down of all waypoint materials across campus at end of week. Duplicate and stock handouts for lab #6 including exam review. Monitor an open-lab student review session for exam #1. Exam #1: Assist instructors with exam setup, including the labeling of waypoints around campus, printing, laminating, and distributing plant ID cards, calibrating, cleaning, and checking GPS units between each lab section, and deleting waypoints. Assist instructors in proctoring exam, including monitoring student activity outside of the classroom during the GPS/compass component of the exam. Pre and post-cleaning of maps used during the exam, file and organize maps in map drawer. Takedown of all waypoint materials across campus at the end of the week.		Field Lab – Ocean Beach Maintain, prepare and clean-up testing equipment.	
7	Lab #7: Setup for lab #7 includes printing and laminating plant ID cards, placing ID cards at 6 waypoints across campus, mark each waypoint with masking tape, check to verify that the lab setup is not disturbed between lab sections. Check all waypoints for environmental changes to insure that the waypoint is still usable. Notify and assist instructors in finding suitable substitute waypoints when necessary. Check, adjust,	Order, laminate, clean, and file topographic maps as necessary.		

	fix, and or replace sling psychrometers. Check all raytech thermal infrared guns, replace batteries when necessary, send out malfunctioning units for repair. Fill water bottles for each lab section for use with sling psychrometer. Assist instructors in transporting and checking in/out the compasses, GPS units, sling psychrometers, and raytech thermal infrared guns for each lab section. Assist instructors in proctoring GPS component of lab #7 to promote student safety while navigating around campus in a variety of environmental conditions as well as to promote academic integrity. Obtain real-time surface pressure distribution from internet during each lab section, copy and paste into a word document for printing, and take to duplicating during each lab section. Post-lab GPS maintenance including cleaning, calibrate, delete waypoints, check format and operation, inventory, check and replace batteries, and re-stock. Check compass declination and adjust as needed. Check and repair sling psychrometers and raytech guns. Replace raytech gun batteries when necessary. Takedown of all waypoint materials across campus at end of week. Duplicate and stock handouts.			
8	Lab #8: Assist instructors with lab setup including preparing lab equipment for use (double meter sticks, kestrels, sling psychrometers, tape measures, compasses). Create set of laminated transect cards for both the mesic and xeric slopes. Clean and inventory cards after use, replace lost cards. Check batteries for equipment and charge large department flashlight for the night section. Duplicate and stock handouts. Obtain plant samples for use in the lab. Check, clean, inventory and store all lab equipment at end of week.			
9	Lab #9 - #12: Each week during these labs, prepare laminated maps for use (clean, discard damaged, and order new replacements). Duplicate and stock handouts for all labs. Clean maps after each lab session, organize and file in map drawers. Check-in/check-out videos from the media desk in the library for use during labs.			
10		Checkout compasses to students and set to proper declination. Set up stations to measure strike and dip. Prepare models for demonstration of geologic structure. Order and maintain field equipment.		
11			Field Lab – Tourmaline (pt. 1) Maintain, prepare and clean-up testing equipment.	
12				
13	Lab #13: Setup 30 stations with rock samples. Re-stock rocks at end of week. Duplicate and stock handouts for lab #13 and review packet for exam #2.			
14			Field Lab – Tourmaline (pt. 2) Maintain, prepare and clean-up testing equipment.	
15		Order, laminate, clean, and file geologic maps as necessary. Set-up and take down stream table lab.	Set up and take down plankton samples and analysis equipment.	
16			Set up and take down.	
17	Exam #2: Assist instructors with exam setup and in proctoring exam, including monitoring student activity outside of the classroom during the sling psychrometer component of the exam. Pre and post-cleaning of maps used during the exam, file and organize maps in map drawer. Takedown of all lab materials at the end of the week.			
	Post-semester cleaning, calibration, inventory, ordering, and repairing of all lab equipment.			

* Every other spring we offer Historical Geology which is a lecture/lab course which would add an additional lab to those listed above.
# On-going tasks.

Request # ________
(To be filled in by Classified Staffing Committee)

Classified Staffing Request Form

Instructions for completing form: Click on shaded area.

Date Submitted **2/25/08** *Job Title* **Earth Sci/Chemistry Lab Technician**

Current FTE **0** *Requested FTE* **0.5**

Department or Program Area **Earth Sciences**

Dean or Manager **Jerry Buckley**

Salary Range ________

Date this position should be filled **Summer 2008**

* Fill out this form for each position requested and forward to the Dean or Manager

Procedure:

- Complete this request for each position required.

    1. The Department Chair/Coordinator or supervisor completes questions 1-7.
    2. The Dean or Program Area Manager collaborates with the Department Chair/ Coordinator or Supervisor and completes question 8.
    3. The Dean or Program Area Manager collaborates with all Department Chairs/Coordinators and Supervisors and determines a division-wide priority for each request.

- Submit the request to the Staffing Committee - email to bill.bradley@gcccd.net

- All responses must be size 12 font, bolded, and 1500 characters or less per question. If documentation is needed, please submit through inter-office mail.

Questions:

1. *Identify basic need. Include specifically how your department Program Review, Strategic Plan, Master Plan, Accreditation or other external review processes support this position. Explain in detail.*

The Earth Sciences Department has a need for a lab/field technician. Our department has no classified staff directly assigned to the department and as such remains the only science department on campus without a lab technician. As a result of moving into the new building,

the acquisition of new equipment, and the addition of new course sections for both the lab and field courses, the need for a technician is even greater. In addition, our lab facility is now being used for Anthropology labs that will likely need technical support. Lab and field course activities have become more detailed, require greater set up and are more equipment-dependent (employing more high-tech equipment). Associated with this is an increased maintenance of that equipment. This is not a new problem. We have an immediate need for a technician to put in at least 20 hours per week. The chemistry department is also in need of a part-time technician and has agreed to share a full-time classified position to fill the needs of both departments.

The representative duties of an earth sciences technician would include, but not be limited to, the following:

- **Organization and maintenance of storage areas that house maps, rock and mineral collections, and field equipment.**
- **Curation of rock, mineral, and fossil sample collections.**
- **Preparation and setup of materials and equipment for laboratory and field classes.**
- **Maintenance and upkeep of electronic equipment such as the Global Positioning System (GPS) units, the YSI water quality meters, and the field radios.**
- **Clean and repair equipment as necessary (water samplers, plankton nets, etc.)**
- **Order consumable supplies as necessary (lab supplies, test kits, etc.)**
- **Oversee checkout of equipment by full- and part-time faculty**
- **Install and integrate software in the GIS lab and on the departmental notebook computer for the collection and interpretation of data.**
- **Maintain the department's digital image archives.**

This need has been expressed in program review documents and educational master plans from prior years, not only for the Earth Sciences department but also for the Chemistry department. The Program Review Committees most recent recommendations included the following:

"Develop a job description for a shared technician with Chemistry and pursue hiring as programs expand."

2. *How will this position contribute to student success and/or other measures of institutional effectiveness at Grossmont?*

An Earth Sciences technician would set up labs, organize, store, clean and maintain equipment. Additionally, this person could assist and tutor students in lab and field courses. Such work is currently performed by faculty in an uncompensated, volunteer effort that goes way above and beyond their normal teaching duties. Without a technician, students suffer because instructors' time and attention are taken up with duties normally performed in all other science departments by technicians.

3. Why should this position be permanent (contract) rather than temporary hourly? Does your department or program area have staff working extra hours to maintain the volume of tasks for the requested position? Explain in detail.

The requirements for maintaining and organizing the lab and field materials are ongoing and require a familiarity with the needs of the department (i.e. samples and equipment). The training of a new staff member requires time and the potential repetition of that training for each temporary hire would be cost- and time-prohibitive. As stated above, we must currently

use valuable instructor time to attempt to keep up with these tasks and as a result cannot devote the quality time needed for either teaching or the lab tasks.

4. Can this position be justified with new federal/state mandates, health and safety requirements? Explain in detail.

   We conduct our labs under the standard health and safety mandates prescribed by the college as well as State and Local Fire Codes. In addition, we require a safe work environment for students, staff, and faculty.

5. Identify all sources of funding (including existing department funding) that will be applied to this position. Give specific dollar amounts.

   Unrestricted funds.

6. Describe the positive impact on other programs, departments and/or services if this position is filled.

   The most immediate impact will be the freeing of the instructor time to focus on class preparation, instruction, and student interaction outside of the classroom. In addition, the maintenance of equipment will reduce unecessary wear and tear that might prolong the life of the equipment, thereby reducing the cost of replacements. The hire would also benefit the Chemistry department.

7. What tasks, duties or services will not be provided if this position is not filled?

   At the moment, we are just keeping up with those minimal tasks that keep the labs running each week. However, as mentioned above, the limited time that faculty can spend does not allow for care and maintenance of equipment on a regular basis, a step that could save replacement costs in the long run.

8. What is the Division or Program Area's best reasons for why this position should be filled? Include a Division/Program Area priority number. Note: Each request should be assigned a different priority number. (This question should be answered by the division or program area)

   With the opening of the new building and at the request of administration, the Earth Science and Chemistry departments have added new lab sections. These additional sections have stretched the limits of what our faculty and the current chemistry lab techs can effectively handle.

Division-wide Priority # _____ of _____ (Total # of requests from Division)

8-10-04

APPENDIX 17 –

ARTICULATION AGREEMENTS

App 17

Articulation Agreement by Major
Effective during the 12-13 Academic Year

To: **San Diego State** Semester			From: **Grossmont College** Semester		

====Geography - General====

This is an impacted major that requires:

a. Completing all coursework in preparation for the major;

b. Completing a minimum of 60 transferable semester units;

c. Having a minimum cumulative GPA of 2.0.

GEOG 101	Earth's Physical Environment	(3)	GEOG 120	Elements of Physical Geography	(3)
GEOG 101L	Earth's Physical Environment Laboratory	(1)	GEOG 121	Physical Geography Laboratory	(1)
GEOG 102	People, Places, and Environments	(3)	GEOG 130	Human and Cultural Geography	(3)
GEOG 104	Geographic Information Science and Spatial Reasoning	(3)	GEOG 104	Introduction to Geographic Information Science	(3)

Language Requirement: Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill graduation requirements for this major.

END OF MAJOR

Articulation Agreement by Major
Effective during the 12-13 Academic Year

To: San Diego State	Semester	From: Grossmont College	Semester

====Geological Science - General====

This is an impacted major that requires:

a. Completing all coursework in preparation for the major;

b. Completing a minimum of 60 transferable semester units;

c. Having a minimum cumulative GPA of 2.0.

* OCEAN 100	The Ocean Planet	(4)	OCEA 112 &	Introduction to Oceanography	(3)
			OCEA 113	Oceanography Laboratory	(1)
		OR			
GEOL 100	Planet Earth	(3)	GEOL 110	Planet Earth	(3)
	AND			**AND**	
GEOL 101	Dynamics of the Earth Laboratory	(1)	GEOL 111	Planet Earth Laboratory	(1)
		OR			
GEOL 104	Earth Science	(3)	GEOL 104	Earth Science	(3)
	AND			**AND**	
GEOL 101	Dynamics of the Earth Laboratory	(1)	GEOL 111	Planet Earth Laboratory	(1)
GEOL 200	Geologic Inquiry and Problem Solving	(3)	No Comparable Course		
GEOL 205	Historical Geology	(4)	GEOL 121	Earth History	(4)
GEOL 221	Mineralogy	(4)	No Comparable Course		
BIOL 100 &	General Biology	(3)	BIO 120	Principles of Biology	(4)
BIOL 100L	General Biology Laboratory	(1)			
CHEM 200	General Chemistry	(5)	CHEM 141	General Chemistry I	(5)
CHEM 201	General Chemistry	(5)	CHEM 142	General Chemistry II	(5)

* Sequence/courses must be completed at institution offering those courses.

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Geological Science - General (continued)

MATH 150	Calculus I	(4)	MATH 180	Analytic Geometry and Calculus I	(5)
MATH 151	Calculus II	(4)	MATH 280	Analytic Geometry and Calculus II	(4)
PHYS 195 **&** PHYS 195L	Principles of Physics Principles of Physics Laboratory	(3) (1)	PHYC 140	Mechanics of Solids	(4)
PHYS 196 **&** PHYS 196L	Principles of Physics Principles of Physics Laboratory	(3) (1)	PHYC 240	Electricity, Magnetism and Heat	(4)

END OF MAJOR

APPENDIX 18 –

THE ONE WHERE WE TOOT OUR OWN HORNS

Scott Therkalsen

From: Sunita Cooke
Sent: Thursday, July 17, 2008 9:30 PM
To: Scott Therkalsen; Judd Curran
Cc: Chris Hill
Subject: FW: Compliment for staff

Scott and Judd,
I know there are many days when things seem quite difficult or you stare at an enormous pile of papers to grade over a holiday break or weekend, and it gets exhausting. I hope that you take the compliment that Kelli Magargal has given you both to heart. There truly are not many jobs in which you get to touch the lives of people in the ways that we do. You get to open their eyes so that they never look at a rock or a mountain in the same way again or take it for granted. Thank you for what you do for all of your students and for making our college such a great place to be.

Sunny

Ms. Chris Hill,
I would like to take this opportunity to compliment you on two of your faculty. Scott Therkalsen and Judd Curran. I am a 42 year old student graduating next week. I have been in school and have had many professors over the years; both of these instructors took extra time and patience with myself and many others in our classes. They were both accessible for office hours and quick to respond to questions via e-mail. It is apparent that both love their subject and this was obvious in their classroom settings. They both have a relaxed, productive and open learning environment. (not the exams mind you) There was a sense of commaaradier amongst the students in class. Though the subject was the most challenging I have encountered, it was one of my profound learning experiences. In a world where teachers are under appreciated, please know that these two have made their mark.

Sincerely,
Kelli Magargal

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Tim Cliffe

From: Mary Kay Rosinski <mknceta@yahoo.com>
Sent: Thursday, 10 May, 2012 08:00 PM
To: Tim Cliffe; Mark Goodman
Subject: Best fieldtrip ever!!

Dear Tim and Mark,

I can't thank you enough for letting me join your trip to the Santa Rosa Plateau.You two are wonderful instructors! I learned so much and enjoyed every minute. I just wish I could have stayed for the whole weekend. Would love to get directions to the Santa Margarita Ecological Reserve. Can the public walk on there or do we need to be with a class?

Keep up the great teaching! Your students are lucky to be in your classes. Hope it's okay, but I would like to mention how wonderful you are at the board meeting Tuesday. Thank you again.

Yours,

Mary Kay

Mary Kay Rosinski
Trustee - Grossmont-Cuyamaca Community College Board
619-742-2067

The College Of
WILLIAM & MARY

Department of Geology

P.O. Box 8795
Williamsburg, Virginia 23187-8795
757/221-2440, Fax 757/221-2093

September 12, 2006

Dr. Jerry Buckley
Dean of Math and Sciences
Grossmont College
8800 Grossmont College Drive
El Cajon, CA 92020

Dear Dr. Buckley,

I am writing to acknowledge the contributions that Judd Curran made at a workshop for Early Career Faculty in the Geosciences: Teaching, Research, and Managing Your Career. The workshop was held June 7-11, 2006 at the College of William and Mary, with an associated trip to the National Science Foundation on June 12. We appreciate the support and encouragement you have given so that Judd could attend the workshop.

Participants at the workshop learned about a variety of active learning strategies and various aspects of assessment and course design, shared ideas for teaching specific courses, considered successful strategies for maintaining a research program and advising/supervising research students, and discussed numerous aspects of planning and managing their career. They also expanded their network of other early career faculty.

The workshop brought together 47 faculty members from colleges and universities across the country as well as eight workshop leader/facilitators. The workshop benefited from the enthusiastic participation of Judd and his openness to new ideas and willingness to share.

This workshop is part of *On the Cutting Edge*, a professional development program for geoscience faculty that is funded by a national dissemination grant from the National Science Foundation Division of Undergraduate Education. The project website at http://serc.carleton.edu/NAGTWorkshops provides information about other workshops as well as web resources on a variety of topics. We hope that you will encourage your geoscience faculty to take advantage of this program.

Sincerely,

Heather Macdonald

Heather Macdonald
Chancellor Professor of Geology
Workshop Convener

cc: Mark Goodman, Chair of Earth Sciences; Judd Curran

Chartered 1693

Chris Hill

From: Darrell Ice [21maxwell@verizonmail.com]
Sent: Thursday, May 18, 2006 8:02 PM
To: Chris Hill
Subject: Geology student update!

Hello, I am a former student of yours in 2005 at Grossmont. I am writing you to tell you that I moved to Texas, where I am contuining my Geological studies at West Texas A&M University. Right now I am going through Geomorphology, and Chemisrty classes. It is all so awesome! I enjoyed your class very much and it truly allowed me to become intrested in Geology as a future career. Well, hope your students are behaving and Grossmont is treating you well, have fun in the sunshine state, and maybe Ill come by and visit you one of these days! Bye, From Darrell Ice

--

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Gmail

Chris Hill <rocdoc10@gmail.com>

FW: Long time...no talk

1 message

Tim Cliffe <Tim.Cliffe@gcccd.edu> **Sat, Jan 21, 2012 at 3:44 PM**

To: Jeff Lehman <Jeff.Lehman@gcccd.edu>, Mark Goodman <Mark.Goodman@gcccd.edu>, Judd Curran <Judd.Curran@gcccd.edu>

Cc: Chris Hill <Chris.Hill@gcccd.edu>, Gary Jacobson <Gary.Jacobson@gcccd.edu>, Scott Therkalsen <Scott.Therkalsen@gcccd.edu>, Mike Matherly <mtmatherly@cox.net>, Steve Davis <steve.davis@gcccd.edu>, Beth Smith <Beth.Smith@gcccd.edu>, Sunita Cooke <Sunita.Cooke@gcccd.edu>

Possible Flex Trip to National Weather Service Forecast Center for Los Angeles (which is located in Ventura)?

From: Todd Hall [mailto:todd.hall@noaa.gov]
Sent: Tue 1/3/2012 9:18 PM
To: Tim Cliffe
Subject: Long time...no talk

Hi Tim,

I do not know if you would recognize the name or not, but I took your Geography 140 class in the Fall of 1996. I wanted to say thank you for being an inspiration in steering me down the path that I followed. I feel really bad that I am updating you on my status about 15 years later. With my time in El Cajon divided between family and friends, I have never reached out to you until now. While taking your class, I talked at length with you a lot during office hours about becoming meteorologist, but I never took the time to update you throughout my years of schooling and entering my career.

Currently, I am Senior Meteorologist with the National Weather Service in Los Angeles (Oxnard, CA). I graduated from UCLA in 2000 with a BS in Atmosperic Sciences. After interning with the National Weather Service in San Diego, I received my first job practicing weather (launching weather balloons, taking observations) in El Paso, TX in July 2000. In April 2003, I moved to Salt Lake City to become a forecaster. Finally in October 2006, I moved to Oxnard to take a lead forecaster job. Here...in Ventura County...is where I sit. I have made several futile attempts to get back to the San Diego area, but unfortunately, the closest I have been able to get is 200 miles.

I am coming down to the El Cajon area between January 16th and January 19th, and I want to find out if you maybe had sometime to chat. I clearly am not looking for anything except to catch up and let you that you can use me as a resource for any of your students that may be interested in entering the field. I feel strongly that it is time to give back with my time. I can certainly come to Grossmont and meet with you there, but I can also meet up for either breakfast, lunch, and dinner. Please let me know if you interested, but if not, I completely understand.

Thank you for your guidance and consideration...

Todd Hall
Senior Meteorologist, NWSFO Los Angeles/Oxnard

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Scott Therkalsen

From: iswebsupport@gcccd.net
Sent: Saturday, May 17, 2008 10:47 PM
To: Scott Therkalsen
Subject: Data posted to form 1 of http://www.grossmont.edu/scotttherkalsen/physical/feedback home.htm

****
Feedback:
Scott's lab class began a bit overwhelming with the volume of information to be covered, but has actually turned into one of my favorite classes. It is a lot of work and has caused many a late night of going over labs, however, the atmosphere Scott has created for the students to learn in is a very positive one. We have learned to rely on each other and trust one another. Scott keeps a challenging subject interestingsubmit

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Tim Cliffe

From: Katherine Popejoy <popejka@gmail.com>
Sent: Tuesday, 14 December, 2010 10:12 PM
To: Tim Cliffe
Subject: Appreciation

Hi Professor Cliffe,
I just wanted to say thank you for being such a great teacher, in both Geology and Geography. It was wonderful having a teacher as knowledgeable and passionate about his area of study as you are. Your lectures really made the material interesting and easy to learn with all of the pictures, diagrams, and handouts, which were a breath of fresh air after all of the monotonous powerpoint lectures I sat through at SDSU. I wish there were more teachers out there like you!
Thanks again, and Merry Christmas!
Katherine Popejoy

Tim:

I wanted thank you for speaking at the American Groundwater Trust teacher training on November 3^{rd}. Your presentation was excellent!! It was interesting, organized and full of useful information. The icing on the cake was your energy and passion!

I hope to work with you again in the future.

Best Regards,

Debby Figoni
Conservation Specialist / Education Coordinator
Chino Basin Water Conservation District
4594 San Bernardino Street
Montclair, CA 91763-3228
909-267-3230 - w   909-477-9002 -c

Conserve resources today for a healthier tomorrow

cc: Eunice Ulloa
Andrew Stone

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Nomination Form For the Distinguished Faculty Award

For the nominator, please consult with the nominee and other faculty members, and respond to the following three questions below. The **deadline** for completion and submission to the campus selection committee is **4:00 p.m., ______, 20__.** Attach a copy of nominee's up-to-date, complete curriculum vitae if available; it will be helpful to the Campus Selection Committee in their deliberations to select a recipient of the award.

Name of Nominee: **Gary Jacobson** RECEIVED FL 2012

Department/Division: **Earth Science**

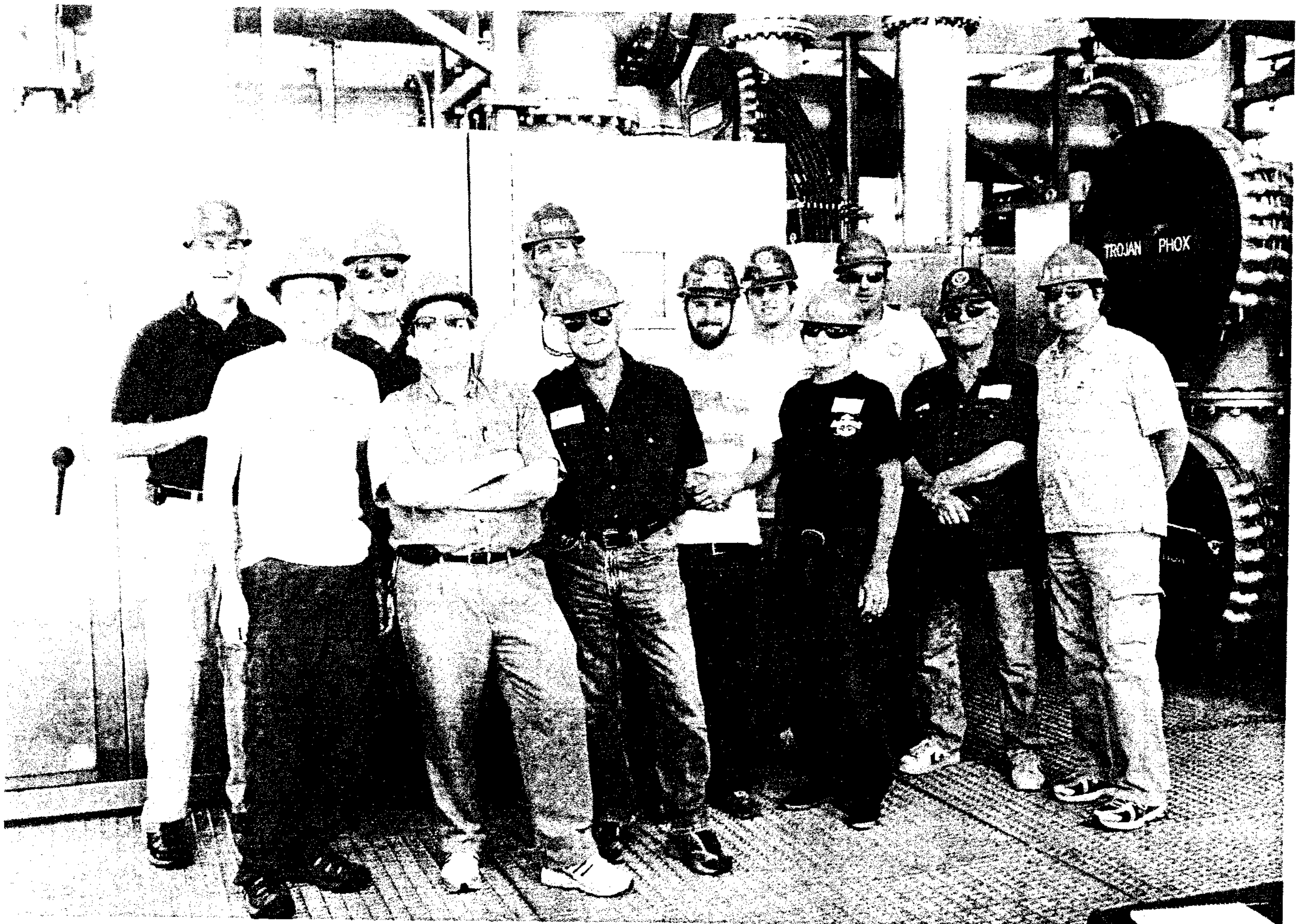
Please provide answers to each of the following questions (there is no word limit on this section).

1. **In what way/s has the nominee contributed to excellence with respect to his/her profession and discipline?**
   This could be articles in refereed journals or other publications, the acquisition of grants, awards, or perhaps the development of innovative and recognized programs. The emphasis here is on scholarly activity.

   Gary is, first and foremost, the academic foundation of the Earth Science Department at Grossmont College. His base-of-knowledge across the physical sciences generally, and across the Earth Sciences specifically, is enormous. He is a superior lecturer, weaving broad explanatory principles into any-and-all discussions about specific phenomena. He is just as masterful at preparing and running a laboratory environment, or in developing and leading a field course, as he is at orchestrating the lecture hall. Similarly, he is just as resourceful one-on-one or online as he is lecturing in front of a packed, "smart-wired" classroom. Finally, his ability to explain complicated phenomena in a manner that anticipates potential sources-of-ambiguity and/or potential questions arising from other disciplines is superior; Gary defines what it means to be a master-teacher at the college level.

2. **In what way/s has the nominee contributed to excellence with respect to Grossmont College and its affairs?**
   Here the emphasis is on involvement and action beyond the classroom or other assigned duties. Activities in this category might be chairing an important campus committee, involvement as a faculty advisor to a student group, serving as department chair or coordinator, serving in the Academic Senate, or perhaps spending time on labor issues or negotiations.

   Going beyond mere assigned classroom duties, and devoting untold hours of labor largely for free, Gary has been a major contributor to the development of a highly popular, rigorous and academically-grounded Field program that now exists in the GC Earth Science Department. This includes a 4-weekend-long, team-taught Spring Field Class that explains San Diego's major rock units, geologic structures, and



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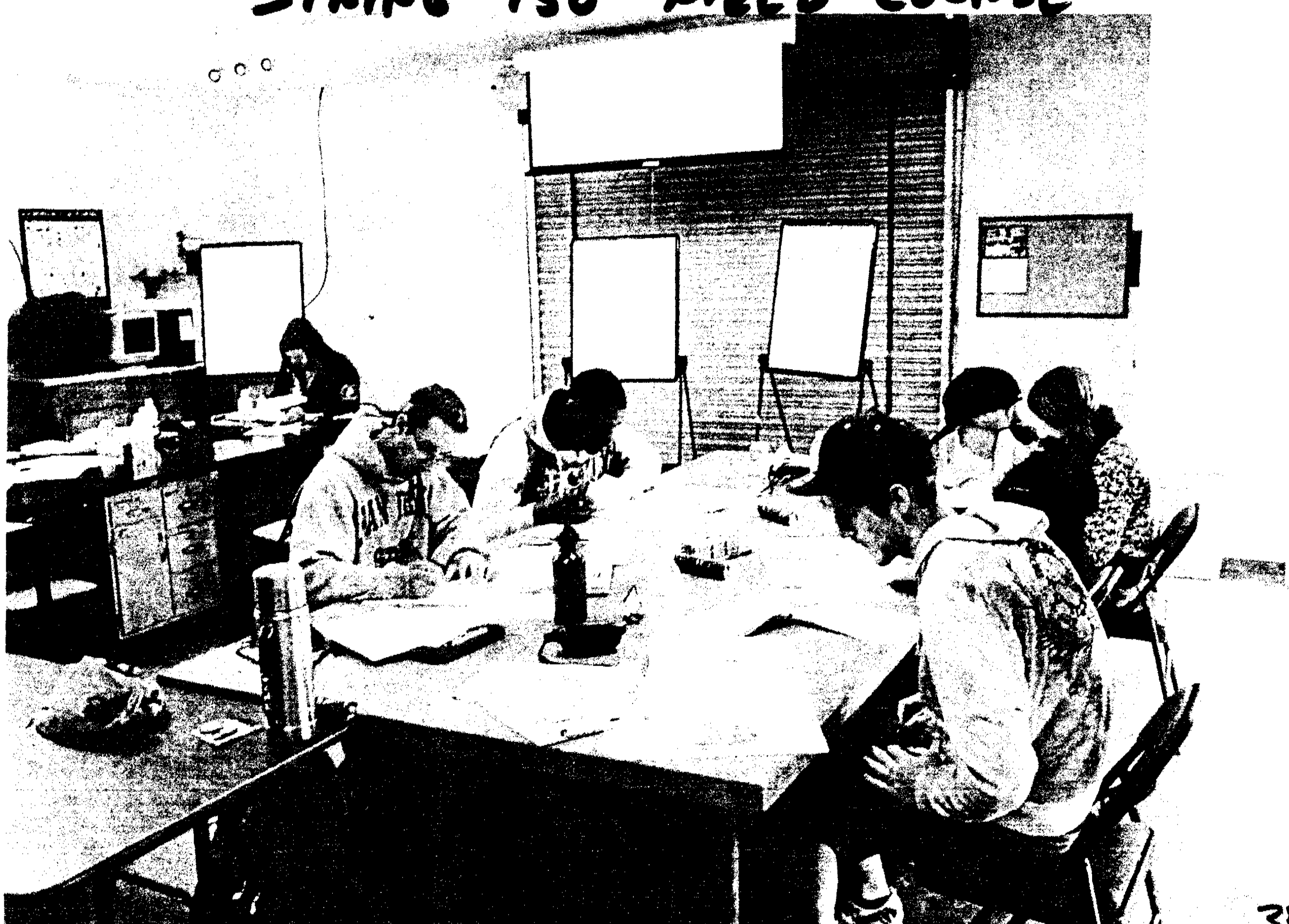
California Experts at Oxnard Teacher Training

Dan Detmer, Engineer, United Water Conservation District, Santa Paula, CA, Tim Cliffe, Hydrographer, US Geological Survey, Poway, CA and Tony Morgan, Groundwater Manager, United Water Conservation District, Santa Paula, CA were presenters at the Oxnard Ground Water Institute for Teachers.

Part of the Institute program involved a field visit to the Freeman Diversion Dam where flow from the Santa Clara river is diverted for irrigation use and to provide recharge water that is later used for drinking water supply supply and to suppress the advance of seawater intrusion. The Institute was sponsored by the United Water Conservation District.

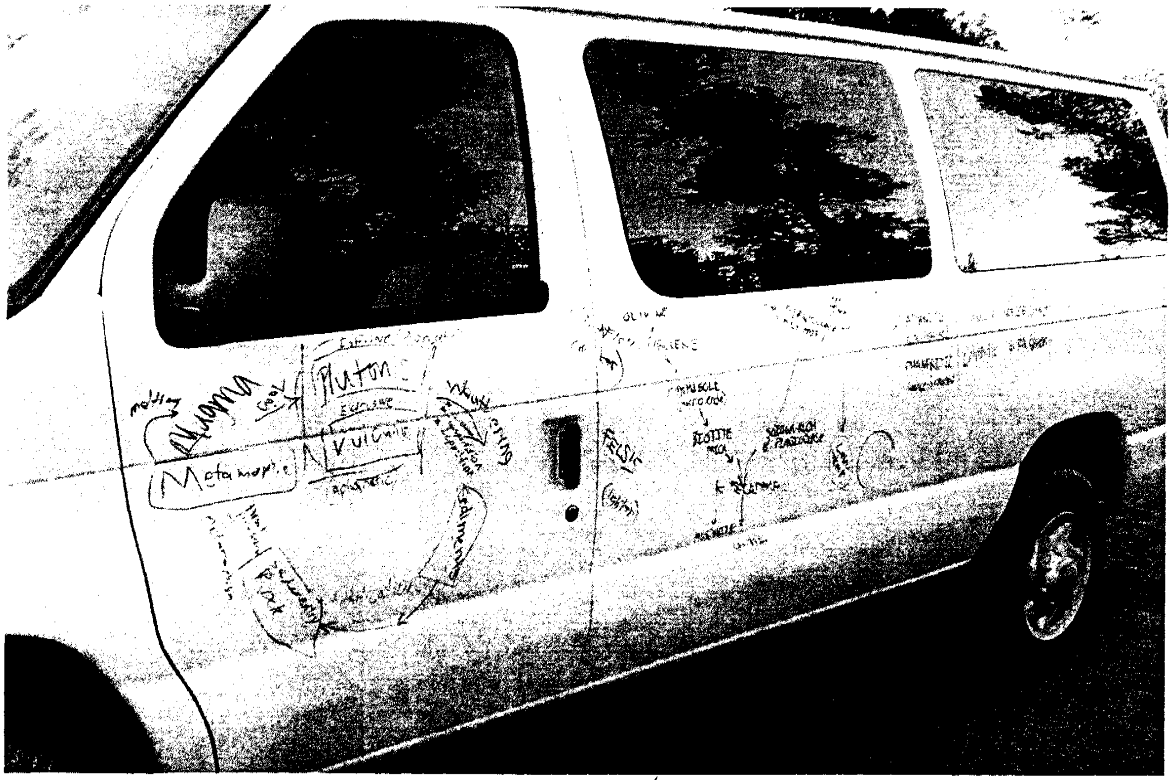
SPRING 150 FIELD COURSE



SPRING 150 FIELD COURSE

FIELD COURSE FINAL EXAMS

EASTERN SIERRA FIELD COURSE



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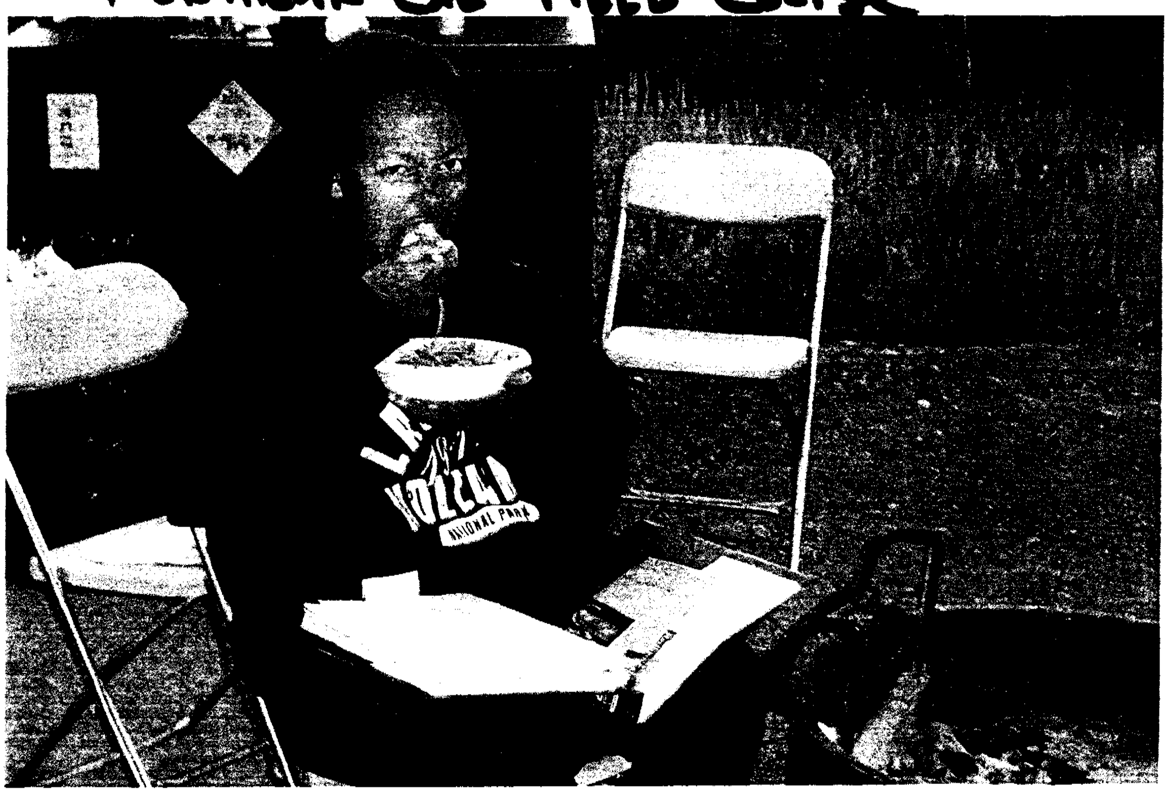
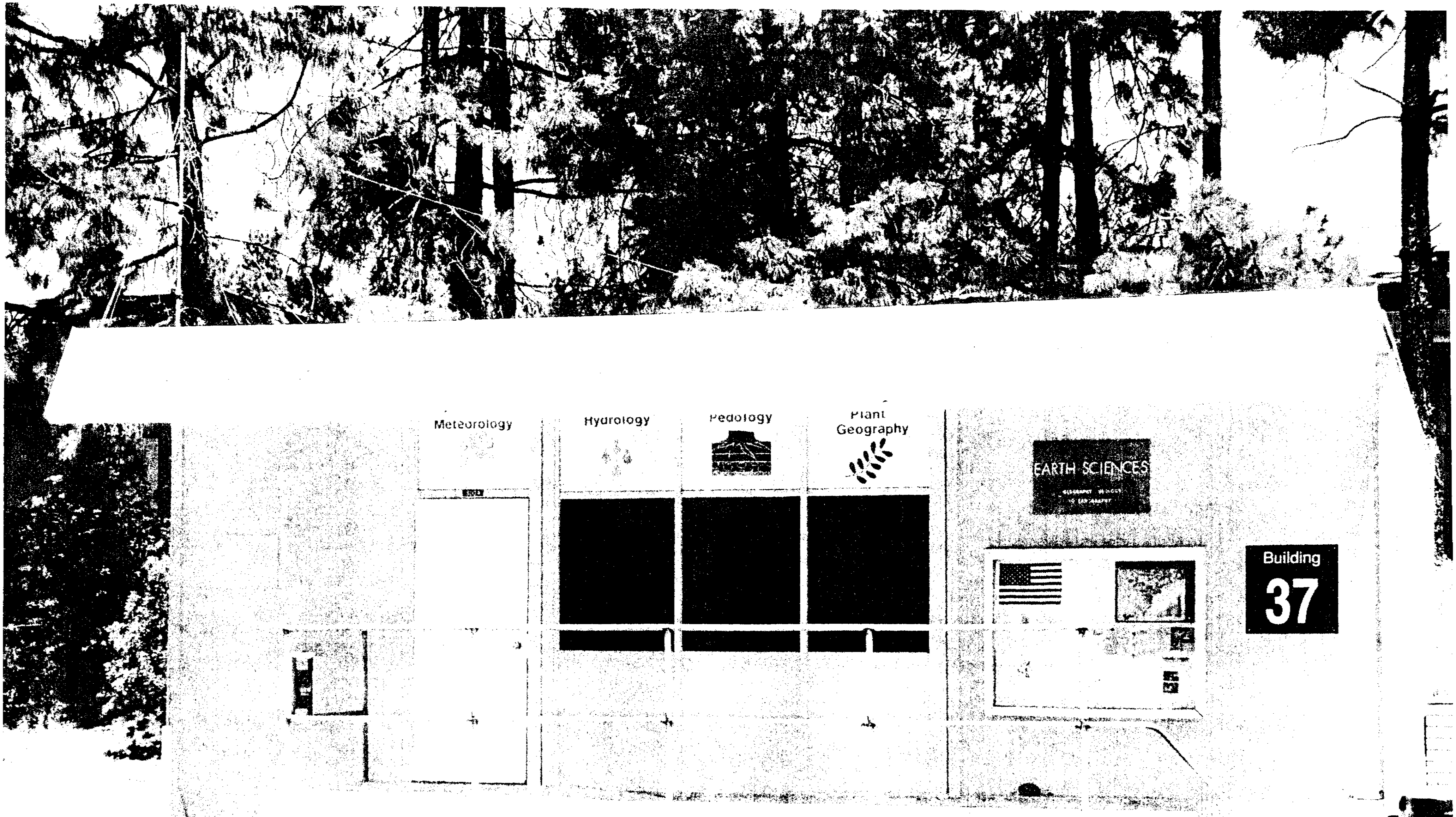
NORTHERN CAL FIELD COURSE





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