MT. SAC
Mt. San Antonio College

unitPIE 2014-15 2015-16 2016-17 2017-18

Planning for Institutional Effectiveness

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NOTE: This PIE Form is optimized to be used in Acrobat or Adobe Reader 10 or later.

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unitPIE 2014-15 2015-16 2016-17 2017-18

Planning for Institutional Effectiveness

Introduction

UNIT	Earth Sciences & Astronomy	Current Year	YEAR 1	YEAR 2	YEAR 3
Contact Person	Julie Bray-Ali & Mark Boryta	2014-15	2015-16	2016-17	2017-18
E-mail / Extension	jbrayali@mtsac.edu / 4148 & mboryta@mtsac.edu / 5266	☑ Summary	☑ Planning	☑ Planning	☑ Planning

Your Unit Program Review will be recorded on this form summarizing the current year and documenting planning for the next three-year cycle.
***Please remember** that all outcomes assessment work should be recorded in TracDat (http://tracdat.mtsac.edu/tracdat) in order for your assessment work to best contribute to institutional reports. Outcomes assessment work may include courses, programs, direct and indirect services, organizational structure, structural elements, and institutional outcomes. Respond to only the outcomes categories or types that apply to your unit.*

Institutional Planning Framework

The college is unified through its demonstrated connection to the mission. Driven by the California Master Plan for Higher Education, revised by the President's Advisory Council, and approved by the Board of Trustees, it informs all planning and assessment.

Institutional Mission

The mission of Mt. San Antonio College is to support students in achieving their full educational potential in an environment of academic excellence.

Unit Mission

Enter your Unit mission statement here if applicable

College Themes and Goals

College themes and goals allow the campus to focus on critical issues. Articulated by the President's Advisory Council and approved by the Board of Trustees, they guide institutional planning and assessment processes.

Theme A: To Advance Academic Excellence and Student Achievement

College Goal #1	The college will prepare students for success through the development and support of exemplary programs and services.
College Goal #2	The college will improve career/vocational training opportunities to help students maintain professional currency and achieve individual goals.
College Goal #3	The college will utilize student learning outcome and placement assessment data to guide planning, curriculum design, pedagogy, and/or decision-making at the department/unit and institutional levels.

Theme B: To Support Student Access and Success

College Goal #4	The college will increase access for students by strengthening recruitment opportunities for full participation in college programs and services.
College Goal #5	Students entering credit programs of study will be ready for college level academic achievement.
College Goal #6	The college will ensure that curricular, articulation, and counseling efforts are aligned to maximize students' successful university transfer.

Theme C: To Secure Human, Technological, and Financial Resources to Enhance Learning and Student Achievement

College Goal #7	The college will secure funding that supports exemplary programs and services.
College Goal #8	The college will utilize technology to improve operational efficiency and effectiveness and maintain state-of-the-art technology in instructional and support programs.
College Goal #9	The college will provide opportunities for increased diversity and equity for all across campus.
College Goal #10	The college will encourage and support participation in professional development to strengthen programs and services.
College Goal #11	The college will provide facilities and infrastructure that support exemplary programs and the health and safety of the campus community.
College Goal #12	The college will utilize existing resources and improve operational processes to maximize efficiency of existing resources and to maintain necessary services and programs.

Theme D: To Foster an Atmosphere of Cooperation and Collaboration

College Goal #13	The college will improve the quality of its partnerships with business and industry, the community, and other educational institutions.
College Goal #14	The college will improve effectiveness and consistency of dialogue between and among departments, committees, teams, and employee groups across the campus.

Where We Are: A Summary and Analysis of the Current Year 2014-15

I. Summary Context - Unit Goals for: Earth Sciences & Astronomy

Identify the goals that guided your Unit's work for the 2014-15 year (from your 2013-14 PIE form) in the following table and connect those goals to the College Themes. *Add rows (+) as needed. Delete rows (X).*

Unit Goal Name	Unit Goal	College Theme
Goal #1: ASTR AA degree	Develop Astronomy Associates Degree including sophomore-level astrophysics and research/ observing classes	A: Academic Excellence
Goal #2: GEOL AA degree	Develop Geoscience Associate Degree, including basic field mapping skills courses	A: Academic Excellence
Goal #3: New Courses	Submit two new geology courses for review: "Global Climate Change" and "Mineralogy"	A: Academic Excellence
Goal #4: Bachelor's degree	Begin review of plausibility for Bachelor's degree program in Geological Sciences	A: Academic Excellence
Goal #5: Opportunities	Provide students with opportunities that broaden their interests in Earth and Space Sciences	A: Academic Excellence
Goal #6: Student success	Apply outcomes research to teaching methods and curricular planning in an effort to help our students achieve academic success.	B: Access and Success
Goal #7: Community outrea	Continue to reach out to the community to encourage their participation in activities related to the Randall Planetarium, the Observatory, and other events on campus.	D: Cooperation/Collaboration
Goal #8: Student access	Make efforts to increase student access to faculty members and facilities. We encourage use of the Earth Science Resource Room, Redinger Exploration Center, Mt. SAC Randall Planetarium and the observatory, in addition to the classroom and the faculty offices to ensure student access.	C: Secure Resources
Goal #9: Cutting-edge scien	Update and augment our Earth Science program to reflect cutting edge science and pedagogy. Special emphasis placed on oceanography and field studies.	A: Academic Excellence

II. Notable Achievements for: Earth Sciences & Astronomy

Enter your Unit's successes for the 2014-15 year in the table below. This provides opportunity for closing the loop on your Unit's activities completed this year. *Text boxes will expand as needed. Add rows (+), delete rows (X).*

Priority for Manager Summary	Unit Achievements for the 2014-15 Year	Connected Unit Goal/ College Theme
High	141 public planetarium shows were offered during 2014-2015 for student and community benefit. Additionally the planetarium was used 122 times by professors for classroom use. In all an estimated 3050 students benefited from use of the planetarium during class time and another estimated 1000 (students and the community) benefited from the public shows offered on weekends. The planetarium charges a per person fee for all public shows and earned over $6,000.00 to be used for future planetarium expenses.	Unit: Goal #7: Community outreacl A. Academic Excellence
High	In 2014-2015 the department filled all three of its field courses (Geology 24, 25 & 29) for the first time; Geology 29 (Regional Field Studies) was offered for the first time this spring/summer (Walker, Mrofka, Boryta). More than 50% of the students in the field classes are returning students from another field class and 5-6 students in Geology 29 have changed their major (or transfer goals) to the geosciences due to their experiences in a previous field class. As part of their field work experience, students participated in 5 day classes in the Sierras, the Death Valley region and 3 day classes to the southern and central California coast. We were particularly proud of lower division students who did geologic mapping in the Poleta Folds and the Kingston Range, areas normally reserved for upper-division or graduate level courses.	Unit: Goal #2: GEOL AA degree A. Academic Excellence
Med	During the October 2014 Solar Eclipse event, five free planetarium shows were offered in conjunction with telescope viewing of the eclipse. Additionally free eclipse viewers made by student volunteers and the planetarium staff were distributed among an estimated 300 + students and community members who came out to view the eclipse. The new 10" and 8" telescopes with solar filters were used during this event.	Unit: Goal #5: Opportunities A. Academic Excellence
High	Interdepartmental partnerships have been developed over the 2014-2015 year for projects using the planetarium: • Architecture in the Planetarium - A FIG project in partnership with Robert Ho developing animations of architectural designs that can be projected in the planetarium to get an immersive environmental effect not possible with flat screens. • The Sky Inside - A planetarium show about Italian domes being developed by Serena Ott - Foreign Languages Department, and Melissa Macias - Fine Arts Department • Our Cosmic Address- Planetarium show script about the solar system being developed by Phi Theta Kappa Honor Society that aligns with 8-12 grade Science curriculum to be used with field trip groups visiting to the planetarium.	Unit: Goal #8: Student access D. Cooperation/Collaboration
Med	The Mt. SAC Observatory is open to students and the community once a month to look through the telescopes and learn more about astronomy (weather permitting). During 2014-2105 weather allowed for 10 telescope open houses with an estimated 700 visitors total, most of whom were Mt. SAC students. Students volunteer each month helped setup, run, monitor and shutdown all seven of the telescopes used for this event. Jessica Draper, the campus telescope technician, teaches the volunteers how to operate the telescopes and supervises them. The new 10" and 8" telescopes are being used for these events. To help with visitor overflow, we are cooperating with the Biology Department to have the Larry Redinger Science Exploration Center open during these events.	Unit: Goal #5: Opportunities A. Academic Excellence
Med	The telescope observatory is used frequently for classes by faculty. During 2014-2015, the observatory was reserved 12 times for classroom use in addition to our telescope open houses, serving an estimated 306 students.	Unit: Goal #6: Student success A. Academic Excellence

Priority for Manager Summary	Unit Achievements for the 2014-15 Year	Connected Unit Goal/ College Theme
Med	The ASTR 99: Telescope Operating and Research class was an offered during Fall 2014. This class used the observatory as a classroom twice a week for students to learn how to operate, align and other astronomy research practices using the 16" telescope. Students also used the observatory twice a week for from sunset to midnight for evening observations under the supervision of Jessica Draper, the campus telescope technician. Using the images they took through the telescopes, students learned how interpret information and reduce usable data for a required end of term research report.	Unit: Goal #5: Opportunities A. Academic Excellence
Med	The Mt. SAC Observatory served as a venue during the 2015 Kepler Scholarship Event	Unit: Goal #7: Community outreacl D. Cooperation/Collaboration
High	Local schools frequently visit the planetarium for school field trips where they can see a planetarium show that aligns with the California Core Curriculum and design, build and launch their own rocket (rockets are made of light weight paper and foam and lunched using compressed air in an open area adjacent to the planetarium). Theses programs are also made available to the public by reservation on weekends to help spread enthusiasm for astronomy and the sciences. All together over 150 reservations were made during 2014-2015 servicing approximately 11,000 visitors, the majority of which were local school field trips. The planetarium charges a small fee per person fee for these events and earned over $37,000.00 to be used for future planetarium expenses.	Unit: Goal #7: Community outreacl D. Cooperation/Collaboration
High	Kepler Scholarship Event was planned and executed by faculty in the ASTR (Bray-Ali, Boryta, Hood) with important support from Earth Sciences faculty as well as faculty and staff from many other areas of the college. The event has been deemed a huge success from several points of view: it was an intimate and classy affair that earned more than enough to fund the scholarships and pay for the event. Net proceeds are being funneled into supporting next year's event.	Unit: Goal #7: Community outreacl C. Secure Resources
Med	FIG project – Astronomy student learning. Study and evaluate the student learning in different introductory astronomy courses (ASTR 5, 8, 5L). We ran tests in many of our astronomy sections, including all sections in Spring, to determine student learning and differences between sections. We also produced two new activities to help student learn and understand some of the more difficult concepts, and will analyze testing results over the summer to determine how these activities affected student learning.	Unit: Goal #6: Student success B. Access and Success
Low	Proposed Astr11 – 2nd level astronomy course to fulfill the request by students who want to pursue the astronomy major.	Unit: Goal #1: ASTR AA degree A. Academic Excellence
Low	Free planetarium shows were offered around the time of the Lunar eclipse in October 2014 and April 2015. An estimated 100 students were serviced through these shows.	Unit: Goal #5: Opportunities A. Academic Excellence
Med	Lackey, Draper and Jones led sessions at Debbie Boroch Science Day. Volunteers included several STEM and teacher-prep students from Mt. SAC	Unit: Goal #7: Community outreacl D. Cooperation/Collaboration
Med	Boryta, Mrofka and Walker added Geology 29 to the curriculum – a course that teaches students field methods and geoscientific thinking in significant National Parks and public lands in the Western USA.	Unit: Goal #5: Opportunities A. Academic Excellence

III. External/Internal Conditions, Trends, Impacts, Retention & Success, Critical Decisions and Outcomes Assessment

The following table is intended to track conditions that influence planning over a multi-year period beginning with the 2014-15 year. Please include data. The "Link to Data Sources and Support Options" button will open a Mt. SAC webpage that offers suggestions and links for possible data sources for your Unit. Text boxes will expand. *Add (+) rows, delete (X) rows as needed.*

Link to Data Sources and Support Options

Year	*Add item* External Conditions, Trends, or Impacts	Data Sources
2014-15	Delay in approval of contract – Adjunct evaluation process has changed dramatically for the new contract, but since the contract was not available until the end of the fall semester, we could not start adjunct evaluations for this year until spring 15. This has caused many difficulties for our department to comply with the required adjunct evaluations.	FA Contract
2014-15	We had a 75% decline in astronomy adjunct staffing going from 14-15 to 15-16. Finding and keeping high-quality astronomy adjunct faculty is extremely difficult when other schools are hiring full-time positions. On top of this, we are trying and rolling out new student learning methods. We would appreciate division office and HR's help and guidance in finding more quality astronomy adjuncts.	Scheduling, Adjunct Availability
2014-15	Conference and Travel funds were restored, allowing faculty to engage in professional development conferences and workshops.	POD
2014-15	Goal #4: GEOL Bachelor's Degree was not selected for the state-wide pilot project	*Cite Data Sources*
Year	*Add item* Internal Conditions, Trends, or Impacts	Data Sources
2014-15	Staffing in Oceanography was tough. We had a decline in Oceanography offerings this academic year.	Schedule of Classes
2014-15	We had a difficult time coordinating timely reimbursements to geology field stations, where students were paying to stay for field courses	*Cite Data Sources*
2014-15	The wireless MtSAC-Staff signal in building 60 is extremely poor in most places (at least in Level 1), making it difficult to take advantage of internet resources in the classrooms.	IT Services
2014-15	New geological field supplies and camping supplies were purchased and stored in building 11, streamlining our field trip procedures. A new field vehicle is to have been purchased (2015?)	Dept Minutes
Year	*Add item* Retention and Success Data	Data Sources
2014-15	To ensure the equivalent learning in all intro astronomy courses, Mike Hood and Julie Bray-Ali are working on a FIG project. The project is still in progress, but we will soon have another faculty member (Mark Boryta), data and more tools we can use to achieve our goal of student learning.	FIG project
Year	*Add item* Critical Decisions	Data Sources
2014-15	We had an unsuccessful tenure process in Oceanography in 2013-14.	*Cite Data Sources*
Year	*Add item* Progress on Outcomes Assessment	Data Sources
2014-15	We have requested the Outcomes team to provide us with clerical help to migrate the data from ePIE to the new outcomes document. We will complete the new required document before the end of the academic year if they can help us to do so.	*Cite Data Sources*

IV. Alignment and Progress on Unit and College Goals: Closing the Loop

This section serves as a "reporting" function. It shows how your Unit closes the loop and connects planning to budget allocation: How did the prioritized college resources connect to your Unit's outcomes? What progress has your Unit made with the resources provided? Include progress on plans that did not require new resources if applicable. You are also prioritizing your Unit's progress or outcome for inclusion in your manager's summary. The **Plan Status** drop-down offers a time-frame update on the progress of your plan.

Some information has been pre-loaded into this form by your manager. Add rows (+) as needed. Delete rows (X).

Priority for Manager Summary	Plan from Previous PIE (2013-14) and Resources Obtained *(if any)*	Resources Secured *(if any)*	Progress/Outcomes/Result/Impact (Resource requests should be based on outcomes assessment)	Connected Unit Goal/ College Theme
High	Meade 8' LX200 & 10' LX90-ACF Telescopes w/telescope filters	$ $12,189.29	These telescopes have been valuable to our efforts. These additional telescopes make it possible to offer on-campus observing nights on the same night as off-campus field trips or observing sessions. We have made good use of the different sizes of telescopes as it is a great tool to show the observable difference in light gathering power on different size telescopes. The addition of the 10" scope allows the students to not only see somewhat fainter objects but also to directly compare what they observed through the 8" scope with what they can see through the 10" scope.	Unit: Goal #7: Community out
		Instr. Equipment		A. Academic Excellence
	Plan Status: Complete	Source 2		
Priority	11X-80X Inspection Zoom Microscope w/ Coaxial Light	$ $708.23	We have planned activities for Geology 8 students in Fall of 2015 that will allow them to consider mineralogy and fabrics of different rock types. Benefit: better understand the different components of rocks.	Unit: Goal #6: Student success
		Instr. Equipment		A. Academic Excellence
	Plan Status: 2015-16 Complete	Source 2		
Priority	18 HP EliteBook 850 Laptops	$ $22,011.67	The old computers were very slow and had extremely slow internet connections. With the new set of lab computers, we are now able to run Google Earth and other online software more smoothly, allowing us to use different lab assignments to teach the subject.	Unit: Goal #6: Student success
		Instr. Equipment		A. Academic Excellence
	Plan Status: Complete	Source 2		
Priority	Astronomy FIG Project	$	We were funded for a FIG through POD, which allowed us to run pre- and post-tests on all of our Astr5 and Astr8 students from Winter '15 and Spring '15 terms. We will be using this data to assess student learning across our various sections, allowing us to compare successes and places for improvement among differing faculty, courses, class meeting times, and hybrid vs. in-person sections. We also created two new activities to address concepts we that we found students struggled with during our testing in Fall '14. We do not have the results of the post-tests yet, but testing done throughout the semester appears to show that our efforts on these activities have indeed improved students' understanding of these concepts.	Unit: Goal #6: Student success
		Other -Add		B. Access and Success
	Plan Status: 2015-16 Complete	Source 2		

SectionTwo

Where We Are Going: Planning for the Next Three Years: 2015-16, 2016-17, 2017-18

I. Planning Context - Unit Goals Assessed and Revised for: Earth Sciences & Astronomy

This table contains your goals as noted in Section One for 2014-15. Review your Unit's goals and revise, add new goals or remove goals that are no longer relevant as appropriate for planning for 2015-16, 2016-17, and 2017-18. *Add rows (+) as needed. Delete rows (X).*

Unit Goal Name	Unit Goal	College Theme
Goal #1: ASTR AA degree	Develop Astronomy Associates Degree including sophomore-level astrophysics and research/ observing classes	A: Academic Excellence
Goal #2: GEOL AA degree	Develop Geoscience Associate Degree, including basic field mapping skills courses	A: Academic Excellence
Goal #3: New Courses	Submit two new geology courses for review: "Global Climate Change" and "Mineralogy"	A: Academic Excellence
Goal #4: Bachelor's degree	Begin review of plausibility for Bachelor's degree program in Geological Sciences	A: Academic Excellence
Goal #5: Opportunities	Provide students with opportunities that broaden their interests in Earth and Space Sciences	A: Academic Excellence
Goal #6: Student success	Apply outcomes research to teaching methods and curricular planning in an effort to help our students achieve academic success.	B: Access and Success
Goal #7: Community outrea	Continue to reach out to the community to encourage their participation in activities related to the Randall Planetarium, the Observatory, and other events on campus.	D: Cooperation/Collaboration
Goal #8: Student access	Make efforts to increase student access to faculty members and facilities. We encourage use of the Earth Science Resource Room, Redinger Exploration Center, Mt. SAC Randall Planetarium and the observatory, in addition to the classroom and the faculty offices to ensure student access.	C: Secure Resources
Goal #9: Cutting-edge scien	Update and augment our Earth Science program to reflect cutting edge science and pedagogy. Special emphasis placed on oceanography and field studies.	A: Academic Excellence
Give your goal a name.	Define a new goal appropriate to your Unit mission here.	Select College Theme

II. Annual Implementation Plan for: Earth Sciences & Astronomy

This section serves as a "planning" function. This is where you ask for resources and record new action plans, activities, or interventions necessary to achieve success. Use the Expected Outcomes section to describe how the plan and resources requested is supported by your Unit's to outcomes assessment plan. This section will also be used to record revisions to plans as needed across the three years of planning.
Add rows (+) as needed. Delete rows (X).

Priority for Manager Summary	Plans, Activities, or Interventions	Resources Needed *(if any)*	Expected Outcomes / Criteria for Success (Resource requests should be based on outcomes assessment)	Connected Unit Goal/ College Theme
High	Upgrade planetarium systems from Digistar 4 to Digistar 5	$ $62,540.00 Other - Planetarium	Increase capability to visualize binary star systems and surface planetary features. Better playback with 60 fps capability, and easier planetarium show development with new ShowBuilder	Unit: Goal #5: Opportunities
Ongoing	Projected Completion 2015-16	Other - Natural Scie	Person Responsible Heather Jones	A. Academic Excellence
Med	Measure telescope vibrations and propose vibration dampening plan	$ Source 1	With a vibration dampening plan and a way to measure the effects of any dampening, facilities can start to take bids on companies who can fix this issue.	Unit: Goal #5: Opportunities
Ongoing	Projected Completion 2015-16	Source 2	Person Responsible Heather Jones	C. Secure Resources
High	3-4 New planetarium shows	$ $20,000.00 Other - Planetarium	New planetarium shows and materials are always needed for planetarium outreach events.	Unit: Goal #5: Opportunities
Ongoing	Projected Completion 2015-16	Lottery	Person Responsible Heather Jones	C. Secure Resources
Med	Planetarium lobby and grounds renovation	$ Facilities Mod	Request for a remodel of the planetarium lobby space to become a more inviting creative space for all planetarium visitors (space murals on walls etc.) as well as the ground adjacent to the	Unit: Goal #5: Opportunities
New	Projected Completion Select	Source 2	Person Responsible Heather Jones	C. Secure Resources
Med	Off Axis Guiding Camera for 16" Telescope	$ $1,000.00 Instr. Equipment	Increased accuracy on telescope tracking to allow for 10+ minutes exposures	Unit: Goal #5: Opportunities
New	Projected Completion 2015-16	Source 2	Person Responsible Heather Jones	C. Secure Resources
High	Additional bathroom stalls added to planetarium restrooms	$ Facilities Mod	Additional stalls are desperately needed to service the large groups that visit the planetarium. We frequently have groups up to 150 at a time.	Unit: Goal #5: Opportunities
New	Projected Completion 2016-17	Source 2	Person Responsible Heather Jones	C. Secure Resources
High	Storage room needed adjacent to planetarium for frequently used tables and chairs.	$ Facilities Mod	Tables and chairs and used during weekend planetarium events are currently stored in the foyer and lobby.	Unit: Goal #7: Community out
Ongoing	Projected Completion 2017-18	Source 2	Person Responsible Heather Jones	C. Secure Resources

Priority for Manager Summary	Plans, Activities, or Interventions	Resources Needed *(if any)*	Expected Outcomes / Criteria for Success (Resource requests should be based on outcomes assessment)	Connected Unit Goal/ College Theme
High	Campus signs for the planetarium and telescope observatory	$ Facilities Mod	The number one complaint received at the planetarium/ observatory is that we are very difficult to find because of a lack of signs. Frequently visitors walk across campus to the telescope	Unit: Goal #7: Community out
New	Projected Completion 2015-16	Source 2	Person Responsible Heather Jones	C. Secure Resources
High	Continued maintenance of the planetarium projection equipment: $4,000.00 annually for Digistar	$ $7,000.00 Instr. Equipment	Regular maintenance will keep the planetarium functioning full time to meet student needs and outreach obligations.	Unit: Goal #6: Student success
Ongoing	Projected Completion 2015-16	Source 2	Person Responsible Heather Jones	C. Secure Resources
High	Equity in learning in all intro astronomy courses	$ Prof. Development	Have applied for FIG funding to continue improving this area. Will look at student learning across courses and sections, with faculty sharing ideas and methods to improve final outcomes	Unit: Goal #6: Student success
Ongoing	Projected Completion 2015-16	Source 2	Person Responsible Mike Hood and Julie Bray-Ali	B. Access and Success
High	Purchase an RSpec-Explorer system with LED light tower	$ $500.00 Prof. Development	From pre- and post-testing results from Fall '14, we have identified the electromagnetic spectrum as an area where students struggle to fully comprehend. We expect this instrumentation will improve	Unit: Astronomy Program
Status	Projected Completion 2015-16	Instr. Equipment	Person Responsible Mike Hood	A. Academic Excellence
Med	Gain approval for Astr 11	$ Source 1	Astr 11 will be approved by Mt. SAC, transfer status obtained from the UCs and CSUs, and the course offered for the first time.	Unit: Goal #1: ASTR AA degree
Status	Projected Completion 2016-17	Source 2	Person Responsible Micol Christopher	A. Academic Excellence
Med	Have a custom tank built to demonstrate the process of density currents in the deep ocean.	$ $7,000.00 Instr. Equipment	Students will better understand turbid vs. laminar flow, stokes law, density driven stratification and an important depositional mechanism	Unit: Goal #6: Student success
New	Projected Completion 2015-16	Source 2	Person Responsible Dave Mrofka	A. Academic Excellence
High	Portable pH etc. meters for field/lab chemistry activities for Geology 1, Geology 8/8L and Ocean 10/10L	$ $8,000.00 Instr. Equipment	Students in Physical Geology, Oceanography and Earth Sciences will have a better understanding of the relationship between carbon dioxide in the ocean and ocean acidity	Unit: Goal #9: Cutting-edge sci
New	Projected Completion 2015-16	Source 2	Person Responsible Dave Mrofka	A. Academic Excellence

Priority for Manager Summary	Plans, Activities, or Interventions	Resources Needed *(if any)*	Expected Outcomes / Criteria for Success (Resource requests should be based on outcomes assessment)	Connected Unit Goal/ College Theme
High	Large open but secured shelving unit (built in?) in 60-1515	$ $2,000.00 Facilities Mod	Large hand samples of rocks and minerals will be visible and can be separated by rock type and used by all instructors, and be more accessible for students	Unit: Goal #6: Student success
New	Projected Completion 2015-16	Source 2	Person Responsible Dave Mrofka	A. Academic Excellence
High	Department retreat for curriculum and SLO planning. We need to put the information gained from SLO and GEO ⊞	$ $1,000.00 Prof. Development	Department will emplace a regular schedule of SLO/GEO data collection and faculty members will have concrete roles in methods of collecting, sharing and using the data.	Unit: Goal #8: Student access
Status	Projected Completion 2015-16	Source 2	Person Responsible Faculty	B. Access and Success
High	Actively recruit and hire student tutors for our General Education courses. We serve almost 2000 students per year in ⊞	$ STEM center	Subject-specific tutoring will increase success and retention.	Unit: Goal #6: Student success
Status	Projected Completion 2016-17	Student Equity	Person Responsible Faculty, STEM-center coordinators	B. Access and Success
Med	Offer Honors Oceanography in 2016	$ Source 1	Students will be able to get honors credit for oceanography.	Unit: Goal #6: Student success
Status	Projected Completion 2015-16	Source 2	Person Responsible Hilary Lackey	A. Academic Excellence
High	Instructors will have access to subject-specific professional development opportunities that will assist in ⊞	$ $5,000.00 Prof. Development	Students will get background in cutting edge scientific ideas, methods and field experiences, preparing them to be strong candidates for transfer to STEM programs at four-year colleges ⊞	Unit: Goal #9: Cutting-edge sci
Status	Projected Completion rolling	Source 2	Person Responsible Faculty, Deans, Professional Development	B. Access and Success
High	Wilderness safety and first aid training for staff involved in outdoor field trips.	$ Prof. Development	Staff will be able to respond appropriately to emergency situations in the field.	Unit: Goal #3: New Courses
Status	Projected Completion 2015-16	Source 2	Person Responsible Mark Boryta	C. Secure Resources
High	Lab space that can be used by all Earth Science disciplines	$ Facilities Mod	Increase offerings to meet student needs. At present we are offering between 4 and 7 courses per day (M-Th) as well as some Fri and Sat offerings in each of our assigned lab rooms (Data ⊞	Unit: Goal #6: Student success
Status	Projected Completion Select	Source 2	Person Responsible Mark Boryta	B. Access and Success

Priority for Manager Summary	Plans, Activities, or Interventions	Resources Needed *(if any)*	Expected Outcomes / Criteria for Success (Resource requests should be based on outcomes assessment)	Connected Unit Goal/ College Theme
Med	Purchase a Stream Table for use in GEOL classes and public outreach	$ $12,000.00	Students in our district have little access to natural streams, yet understanding their development over time is a crucial part of the curriculum in the geosciences. A high-quality stream table will	Unit: Goal #6: Student success
		Instr. Equipment		
Status	Projected Completion 2016-17	Source 2	Person Responsible Mark Boryta, Becca Walker, Dave Mrofka	A. Academic Excellence

III. Resources Identified in Relation to Planning

This section will serve the budget prioritization function in the Manager's PIE. Your manager will inform you when actual quotes are due.

SectionThree

Recommendations for Improving the Planning Process

What additional information should the College provide to assist your Unit's planning?

Since "success and retention" is one of the categories in section 1, grade distribution data should be distributed with the PIE form.

What suggestions do you have for improving the planning process for your Unit?

Enter your suggestions for improvement here.

Enter your name as contributing to and approving of this Unit PIE Plan below. *Add rows (+) as needed.*

Contributer		Contributer	
Heather Jones	☑ Approve	Mark Boryta	☑ Approve
Julie Bray-Ali	☑ Approve	Micol Christopher	☑ Approve
Mike Hood	☑ Approve	Hilary Lackey	☑ Approve
David Mrofka	☑ Approve	*Add your name as contributing to this Unit PIE and check that you approve*	☐ Approve

Thank you for completing the Unit PIE form summarizing 2014-15, and initiating your Unit's planning for the 2015-16, 2016-17, and 2017-18 three-year cycle.

Please save this form and forward to your Unit's manager by 06/30/ 2015.
Questions regarding this form? Send an email to Don Sciore, Interim Associate Dean of Arts, member IEC, at dsciore@mtsac.edu