

**FISCAL YEAR 2017
CAPITAL OUTLAY PROJECT REQUEST**

Institution Name: Northwestern Michigan College

Project Title:

Project Focus: Academic Research Administrative/Support

Type of Project: Renovation Addition New Construction

Program Focus of Occupants: Academic

Approximate Square Footage: 38,000 square feet

Total Estimated Cost: \$14,499,400

Estimated Start/Completion Dates: One year build. We have been working with architect on design drawings and would be ready for the construction project.

Is the Five-Year Plan posted on the institution's public internet site? Yes No

Is the requested project the top priority of the Five-Year Capital Outlay Plan? Yes No

Is the requested project focused on a single, stand-alone facility? Yes No

**EXECUTIVE SUMMARY OF FY 2017 REVISIONS TO
West Hall Innovation Center Renovation and Expansion**

- **Total Project Cost reduced from 2016 project by \$5.6 Million.** This is over 20% reduction from \$20 Million to \$14.4 Million.
- **State Share reduced by \$2.8 Million.** Again, this is a greater than 20% reduction from \$10 Million to \$7.2 Million.
 - Removal of the healthcare simulation function based on a public-private partnership with a local health care provider which will provide a much more effective regional solution;
- **Increased financial commitment by NMC of \$6 Million for self-funded Phase I of the revised project.**
- **Increased Efficiencies and Operating Cost Reductions.** Completion of the revised project will allow NMC to close all non-residential student support and classroom buildings located at Main Campus on weekends, thus significantly reducing utilities and other operating costs.

Describe the project purpose.

The purpose of the project is to renovate and expand a centrally located 50 year old building into new space that houses robust technology rich and flexible learning labs. Northwestern Michigan College (NMC) has seen an increase across the curriculum in the use of simulation, team based and project learning. This approach to learning requires greater flexibility in classroom design, adaptability, and a technology rich environment.

In addition, NMC plans to expand student housing in the next year adding 150 beds with a goal of adding an additional 150 beds in the next three years. With the increase in team based learning and the increase in residential students we see a need for collaborative space that can be utilized for extended hours. The current building is ideally located to accommodate both flexible space and hours. NMC plans to self-fund a new library that is connected to this facility. Once this and the West Hall Innovation Center Renovation and Expansion are completed, we will be able to utilize one building for evening and weekend hours. This should result in cost savings and better security during off hours.

Learning spaces are often part of larger physical spaces on campus including both informal and formal settings for large group project or small quiet learning. **The project goals for the facility include:**

- Learning lab space for group design projects in multiple disciplines
- Thoughtful layers of learning spaces in a variety of scales to promote learning to continue outside the formal learning space
- Space to explore and execute a variety of STEM related activities including expansion of our existing “hacker space” program
- Learning labs that have the flexibility and adaptability for group and individual learning and for learning partnerships with institutions outside the region
- Breakout spaces that extend the capabilities of adjacent learning labs
- Technology enhanced lab that allows interactive conversation and work with national and international partners.

The project outcomes for our learners include:

- Give learners skills and abilities for them to be successful in our transforming global society and economy
- Encourage innovation and creative risk taking
- Engage students in real life problem solving
- Help students become better communicators and critical thinkers
- Engage in collaborative team based learning
- Utilize Faculty and community members as learning mentors
- Connect our external business community to our learners through a robust learning environment

Students need space to expand learning and become part of a larger community of learners. This project will provide both formal and informal learning spaces. The space will be used for formal learning but we do envision the space to be scheduled during non-traditional academic hours. This space would be used by over 37 active student groups. Many of our groups require

technology rich, project based learning spaces for service learning projects. These student groups help to engage students and provide a sense of community. Research shows that students gain greater self-confidence when engaged in these activities which results in greater academic success.

Describe the scope of the project.

The scope of the project is to renovate 20,000 square feet of an existing 50 year old building and add 18,000 square feet of new learning space. The project will provide a total 38,000 square feet of space for learning and collaboration.

These spaces are designed to provide space for mentoring, team based learning or individual exploration. Learning spaces both formal and informal need to provide access to class materials digitally and neutral space must be equipped to promote learning. We believe this new space will accommodate learning for the liberal arts students, occupational divisions and technical fields.

One example of our growing need for adaptable simulation space is our CENA program that would utilize the new space for training. NMC has cross discipline simulation occurring in both the business and social science division that would utilize the new space for project based learning. NMC has established relationships with a number of colleges and businesses in the national and international arena. These facilities will allow us to expand these programs and engage our students and local businesses in project based virtual work. This is exactly the type of learning experience our students need to be successful in the current century. What used to be termed “soft skills” are actually the hard skills and the addition of these classrooms/learning labs will allow for increased experiences in these areas.

The project will provide for 13 additional learning spaces in a variety of configuration levels. They will provide us with adaptive learning spaces that can accommodate traditional learning, hacker space and entrepreneurial activities.

- 3 Learning lab classrooms that will seat 24 students each
- 2 Large Simulation/Adaptable Learning labs with each having capacity of 30 students
- 2 Adaptable Learning/Simulation labs that can be divided up to 4-8 smaller spaces – total capacity 60 students. Smaller spaces can be captured and assigned to teams for semester long project based learning
- 1 technology enhanced lab that allows interactive conversation and work with national and international partners – capacity 20
- 1 Large team based learning classroom with 4 break out rooms
- 1 Tech Help desk with 24 student computers
- All spaces will include technology rich settings

Additional space in the building will provide for office space for student and facility support. We believe that the renovation and addition will provide our learners with a technology rich, collaborative environment that will promote a sense of community based learning.

Please provide detailed, yet appropriately concise responses to the following questions that will enhance our understanding of the requested project:

1. How does the project enhance Michigan's job creation, talent enhancement and economic growth initiatives on a local, regional and/or statewide basis?

Northwestern Michigan College (NMC) is vital to the region. NMC conducted an economic impact study in 2014. The study confirms that NMC not only provides direct employment for the region but also enhances the business community. Having NMC in the region is advantageous to both employers and county residents who are potential members of the workforce. The college provides training and knowledge that enhances workers' productivity and employability. It also helps to retain workers in the region

The 2014 economic impact study conducted by the UpJohn Institute found that individuals holding an associate degree in Northern Michigan had a low 3.8 percent unemployment rate in 2012 compared to a high of 14.9 percent rate for persons with only a high school degree. Networks Northwest projects that all occupations in the region will see a 5.2% growth by 2020.

NMC provides specialty programming for bachelors, associates and certificate programs. We support the business community through the NMC Training Division. In 2014 the economic impact study showed that their activity provided 192 jobs to the region as well as \$35.2 million in total sales and \$14.7 million increase in the region's Gross Regional Product.

NMC technical programs include advanced manufacturing, manufacturing tech, engineering, electronics tech, welding and construction trades. These skills are high demand field in the region and state.

As President Nelson has stated, NMC's purpose is to provide our communities and learners with the skills, experiences and values that help them create social and economic wealth during their lifetime.

NMC is positioned to provide both formal and informal knowledge and training for the region. Our service area covers Antrim, Benzie, Grand Traverse, Kalkaska, Leelanau and Wexford counties. It is important to the region that NMC provide state of the art facilities to accommodate learning in the region.

The new West Hall Innovation Center Renovation and Expansion will provide our learners with a facility that they can experience collaborative and engaged learning. The new space will enable NMC to provide robust technology rich learning and simulation labs to help students gain the skills and experience that will enable them to create jobs within their industry. The space will also provide an environment that will give students the ability to have learning experiences that encourage innovation, leadership and self-confidence. These skills will translate into a stronger workforce for the region and state.

2. How does the project enhance the core academic and/or research mission of the institution?

The project is tied to the required Higher Learning Commission Accreditation Criterion which is "Helping Students Learn". The project provides students with 3 new learning labs, 4 new simulation labs and a large team based learning space with 4 break out rooms. At its peak NMC's enrollment was over 5,000 students. Our current enrollment is just over 4,000. We envision this space to be used by our students, to enrich their learning experience and community members as they develop entrepreneur activities in the region. The project will renovate a building that is 50 years old into new space that will accommodate the needs of the students learning styles. Research shows that students that are engaged in active hands on learning have a greater success rate. As we look to raise our student persistence and completion rates, we recognize that we must change the physical learning environment for the learner.

3. How does the project support investment in or adaptive re-purposing of existing facilities and infrastructure?

The project renovates and expands an existing 50 year old building. The building is in the center of campus and is in the best location for both residential and commuting students. The project will allow the college to consolidate the library, new interactive classrooms and student learning spaces that are utilized in the evenings and weekends into one building. This will allow for some cost savings in utility costs for other buildings on campus. The project maximizes the use of an existing building, while the addition will give us greater flexibility in learning spaces that are needed to accommodate today's learning method

4. Does the project address or mitigate any current health/safety deficiencies relative to existing facilities? If yes, please explain.

The building was built in 1965. A renovation of the building would allow us to update the building based on emergency management protocol and today's ADA requirements. This would include a redesign of some of the exterior windows, ability to provide building wide emergency notification and enhanced accessibility for students with disabilities. In summary some of the deficiencies that would be addressed with the renovation would include:

- New emergency management notification system
- Additional barrier free restrooms
- HVAC heating and cooling upgrades
- Window replacements

5. How does the institution measure utilization of its existing facilities, and how does it compare relative to established benchmarks for educational facilities? How does the project help to improve the utilization of existing space and infrastructure, or conversely how does current utilization support the need for additional space and infrastructure?

Northwestern Michigan College was one of the first colleges to use classroom efficiency rather than go- numbers to determine enrollment decisions. Starting in 2000, NMC adopted an efficiency model whereby the college set an ambitious target to have the college achieve an average of 90% fill rate for our classes. While not reaching that goal in every area due to the need to support smaller efficiency in some key specialty areas, the college average has reached between 82% and 85% in the last five academic years. In a number of areas our classes are entirely full. To further our efforts in the last two years, we have even over enrolled some of our classes so that even after some attrition in the first week, the remaining class still is at 100%.

The college analyzes the utilization of our current buildings using our scheduling software. Our current utilization reports show that our current adaptive learning spaces are at maximum use. These spaces are scheduled for large and small student study groups. Additionally, our reports show that simulation space is currently at capacity. These adaptive rooms are used by both our for credit and certificate programs. NMC currently is at capacity for our residential students and will be adding 300 new beds in the next three years. The addition of the 300 new beds will require additional learning spaces for residents. These spaces need to be flexible, technology rich and encourage team based learning. The project would improve a 50 year old building with upgrades in mechanics and electrical systems.

6. How does the institution intend to integrate sustainable design principles to enhance the efficiency and operations of the facility?

NMC is committed to sustainable design. NMC self-funded the purchase and renovation of a former manufacturing facility in 2010 that has led to LEED certification. The new facility is used to teach our sustainable energy programs, construction trade and other technical programs that relate to the sustainable design fields. In 2009, NMC conducted an energy audit to identify areas of improvement in current building. Each year the College commits to projects that will result in energy efficiencies. We have converted exterior and interior lighting to LED efficient lighting, installed occupancy sensors in classrooms, hallways and restrooms.

The proposed project will include:

- Upgrades to the HVAC heating and cooling
- Window replacement
- Occupancy sensors

- Improved building envelope design
- LEED qualifying building materials and design

NMC has shown a commitment to sustainable design principles in construction of both new buildings and renovation projects. This project will see the same level of commitment to integrate sustainable design principles to enhance operating efficiency.

7. Are match resources currently available for the project? If yes, what is the source of the match resources? If no, identify the intended source and the estimated timeline for securing said resources?

Yes the college has the resources to fund the match for this project. The college has set aside reserves for capital projects. These reserves could be used for this project. The college also has a current debt capacity of \$44 million dollars. NMC's credit rating by Standard & Poor's is AA and Moody's rating is Aa2. The college refinanced a bond in January, 2015 receiving an interest rate of 1.38% and saving \$1.2 million dollars for the taxpayers over a five year period. If this project was funded we would provide the college's match through:

- The college current plant fund reserves
- Private contributions from NMC Foundation
- Debt for any remaining amount needed

The NMC Foundation is one of Michigan's most successful community college foundations. NMC Foundation, since established in 1981, has raised over \$55 million to support the college in the area of scholarships, programs and new construction. Either one or a combination of the sources listed above would provide the College's match.

8. If authorized for construction, the state typically provides a maximum of 75% of the total cost for university projects and 50% of the total cost for community college projects. Does the institution intend to commit additional resources that would reduce the state share from the amounts indicated? If so, by what amount?

NMC is committed to the 50% match that is required for the project. We would be able to exceed the 50% match requirement by delaying other capital projects. This may effect timing of other deferred maintenance projects but, if the committee feels this would be advantageous and allow for funding by the State, we would work to arrange above the 50% match requirement.

9. Will the completed project increase operating costs to the institution? If yes, please provide an estimated cost (annually, and over a five-year period) and indicate whether the institution has identified available funds to support the additional cost.

We do not estimate a significant increase in operating costs if this project was funded. We are adding an additional 18,000 square feet, utility costs for the college are \$1.72 per square feet, which would add an additional \$30,960 in utility costs. We expect the majority of this to be offset by building upgrades that will significantly reduce the overall utility costs for the building. These improvements include, insulated exterior windows, lighting controls, new HVAC equipment and controls. The project renovates 20,000 square feet of a 50 year old building. These improvements will significantly reduce our overall operating costs to help offset the addition to the building.

10. What impact, if any, will the project have on tuition costs?

The project should not have any impact on tuition costs. We expect to fund our match from a combination of current reserves, private donations and/or debt as stated in question number 7. The college historically includes in its operating budget over \$1 million dollars annually toward plant fund projects and increased an additional \$500,000 for capital improvement for fiscal year 2016. These transfers can be used to offset college capital projects. These are already built into our budget model for the next 4 years so we do not expect any additional increase to tuition due to this project being funded.

11. If this project is not authorized, what are the impacts to the institution and its students?

If this project is not authorized it will be a deterrent to our current and future students. The space would provide a more robust learning environment that will give students the ability to have learning experiences that encourage innovation, leadership and self-confidence. These skills will translate into a stronger workforce for the region and state.

12. What alternatives to this project were considered? Why is the requested project preferable to those alternatives?

NMC has requested this project for the last six (6) years. We looked at some alternatives to the project and have reduced the size in this year's request. We have decoupled some of the healthcare simulation from the proposal because we are exploring a partnership with our regional healthcare provider. There is not an alternative to the current request. NMC needs to renovate this 50 year old facility; it is centrally located to accommodate multiple discipline units and will be connected to our library. The proposed project that connects new learning space with our library will provide some additional operating efficiencies for utility and personnel costs.

Supplemental Information

In FY 2015 the NMC project received 112 of a possible 200 points. In FY 2016 the identical project received 88 points. (See table b below for detail)

The following explanation of project revisions and other factors for FY 2017 describes why the project merits a higher score.

a. NMC Statement Regarding Evaluation Criteria for FY 2017 Capital Outlay Submission

Evaluation Criteria	Evaluation Factors
<p>Jobs – impact on job creation in this State</p>	<p>To what extent does the project support Michigan’s talent enhancement job creation and economic growth initiatives on local, regional and/or statewide</p> <p>NMC STATEMENT: NMC score on this criteria was three (3) points lower in FY 2016 than FY 2015 for what was then an identical project. Significant project enhancements including “hacker space” and other elements merit a higher score in FY 2017.</p> <p>Please see responses to Question 1 in submission</p>
<p>Core – impact on the core mission of the institution</p>	<p>To what extent does the project enhance the core academic, research or programmatic mission of the institution</p> <p>NMC STATEMENT: Please see response to Question 2 in submission.</p>
<p>Infrastructure - Investment in existing facilities and infrastructure</p>	<p>To what extent does the project support investment in or adaptive repurposing of existing facilities</p> <p>NMC STATEMENT: Project changes merit maximum points for this criteria in FY 2017. Project is a combination of renovation and addition to existing obsolete facility. Moreover, Phase I (non-capital outlay portion) of this project is a renovation and expansion of an existing obsolete facility to create a new library.</p>

<p>Life and safety deficiencies</p>	<p>To what extent does the requested project address facility or infrastructure deficiencies the pose a serious threat of injury or death.</p> <p>NMC STATEMENT: Please see response to Question 4 in submission.</p>
<p>Utilization – occupancy and utilization of existing facilities</p>	<p>To what extent has the institution demonstrated occupancy and effective utilization of existing facilities to merit the capital investment.</p> <p>NMC STATEMENT: NMC score for this criteria was significantly lower in FY 2016 than FY 2015 for what was then an identical project. Project changes merit a maximum score on this criteria for FY 2017 because the combination of Phase I (non-capital outlay portion/renovation and expansion of existing building to create new library) and Phase II (capital outlay portion/renovation and addition) will create a central campus learning environment which will in turn allow all other non-residential buildings on campus to be closed during weekends resulting in utility and other cost savings and a far more efficient overall usage of facilities.</p>
<p>Sustainable – integration of sustainable design principles to enhance the efficiency and operation of facility</p>	<p>To what extent does the project incorporate sustainable design features to enhance the operational efficiency.</p> <p>NMC STATEMENT: Please see response to Question 6 in submission.</p>
<p>Cost – estimated cost</p>	<p>To what extent does the project require state costs participation.</p> <p>NMC STATEMENT: NMC received the maximum score of twenty (20) for this criteria in FY 2015 and 0 points for this criteria in FY 2016 for what was an identical project with the same overall cost for both years: \$20 Million total; \$10 Million state share.</p> <p>The explanation we received from the State Budget Office was that the criteria in FY 2015 was based on state share and the criteria used in FY 2016 was total project cost.</p>

	<p>NMC has made significant changes to this project which have lowered the total project cost to less than \$15 Million. These changes are:</p> <ul style="list-style-type: none"> • Removal of the healthcare simulation element based on a public-private partnership with a regional health care provider; and • Opting to break the project into two phases with the first phase being a renovation and expansion of existing space on a completely self-funded, non-capital outlay basis. <p>Assuming the same scoring scale is used for this criteria in FY 2017 as was used in FY 2016, NMC should receive at least ten (10) points (less than \$15 Million total cost).</p>
<p>Match – institutional support</p>	<p>To what extent is the institution proposing to support the project with its own resources beyond what is typically required.</p> <p>NMC STATEMENT: NMC received 1.25 out ten (10) possible points for this criteria in FY 2015. NMC has a sufficient reserves, borrowing capacity/bond rating, and fund raising ability to secure the traditional 50% institutional match for this project on a very timely basis.</p> <p>In addition, NMC has reduced the overall cost for this project by more than \$5 Million in the following ways:</p> <ul style="list-style-type: none"> • Removal of the healthcare simulation element based on a public-private partnership with a regional health care provider; and • Opting to break the project into two (2) phases with the first phase being a renovation and expansion of existing space on a completely self-funded, non-capital outlay basis. <p>Although not strictly speaking a match above the normal 50% threshold, the decision to spend \$6 Million for Phase I on a self-funded basis demonstrates a far above normal institutional commitment to this project worthy of a higher score.</p>

<p>Operating – estimated operating costs</p>	<p>To what extent has the institution identified operating costs and existing resources to support them</p> <p>NMC STATEMENT: This project will reduce utilities and other operating costs for the reasons stated in the response to Questions 5 & 9 of the submission and in the utilization section above. This merits a higher score on this criteria than NMC received in both FY 2015 and FY 2016.</p>
<p>Tuition – impact on tuition</p>	<p>To what extent will students be held harmless from the financial costs of the project.</p> <p>NMC STATEMENT: This project will not increase tuition rates and will decrease operating costs for the reasons previously stated.</p>
<p>History – prior appropriations received by the institution through capital outlay</p>	<p>To what extent have state capital outlay investments in the institution been less relative other peer institutions</p> <p>NMC STATEMENT: NMC should receive the maximum points for this criteria as it ranks 23rd out of 28 community colleges (bottom 20%) in capital outlay funding received since 2005. See attached chart based on Senate Fiscal Agency documents.</p>
<p>One building – is the project focused on a single stand-alone facility</p>	<p>Is the project consistent with SBO instructions the only requests for single, stand-alone facilities may be submitted</p> <p>NMC STATEMENT: NMC has received maximum points for this criteria and should continue to do so.</p>
<p>Compliance – history of compliance with JCOS and DTMB project requirements</p>	<p>Has the institution been in compliance with statutory and DTMB requirements in all material respects on previously constructed state projects</p> <p>NMC STATEMENT: NMC has received maximum points for this criteria and should continue to do so.</p>

b. NMC Scoring Comparison for FY 2015 & FY 2016

Evaluation Criteria	FY 2015 Score	FY 2016 Score	Total Possible 2016	Total Possible 2015
Jobs	18.75	21.25	40	30
Core	25.00	25.75	40	30
Infrastructure	8.00	5.00	10	10
Life & Safety	0.00	0.00	10	30
Utilization	3.00	1.25	10	10
Sustainable	1.50	3.25	10	10
Cost	20.00	0.00	20	20
Match	0.00	1.50	10	10
Operating	1.50	1.25	10	10
Tuition	9.25	2.75	10	10
History	5.00	6.00	10	10
One building	10.00	10.00	10	10
Compliance	10.00	10.00	10	10
Total	112.00	88.00	200	200

<u>Cost Scoring 2015 Universities</u>	<u>Cost Scoring 2016 Community Colleges</u>	<u>2016 Scoring Universities</u>
0 = greater than \$40M	0 = \$20M or more	0 = \$40M or more
5 = \$40M or less	5 = less than \$20M	5 = less than \$40M
10 = \$30M or less	10 = less than \$15M	10 = less than \$30M
15 = \$20M or less	15 = less than \$10M	15 = less than \$20M
20 = \$10M or less	20 = less than \$5M	20 = less than \$10M

Note in 2015 there was one cost scoring breakdown. In 2016 there is one for universities, one for community colleges and one for state agencies. 2015 all agencies used same scoring for costs, in 2016 the scoring and thresholds are different for community colleges as compared to the other agencies.

c. Community College State Share Capital Outlay Funding since 2005 according to Senate Fiscal Agency

Rank	Community College	State Share
1	Jackson	\$26,050,000
2	Wayne	\$21,000,000
3	Mid-Michigan	\$17,089,800
4	Lansing	\$14,975,000
5	Kalamazoo Valley	\$11,994,000
6	Washtenaw	\$10,400,000
7	Macomb	\$10,250,000
8	Delta	\$9,992,000
9	Monroe	\$8,500,000
10	Southwestern Michigan	\$7,600,000
11	Henry Ford	\$7,500,000
12	West Shore	\$7,399,700
13	Muskegon	\$7,146,800
14	Bay De Noc	\$6,624,300
15	Montcalm	\$5,716,700
16	North Central Michigan	\$5,214,200
17	Schoolcraft	\$5,019,900
18	Grand Rapids	\$5,000,000
19	Alpena	\$4,162,300
20	Mott	\$4,078,000
21	Kirtland	\$1,005,000
22	Gogebic	\$750,000
23	Northwestern Michigan	\$650,000
24	Glen Oaks	\$0
25	Kellogg	\$0
26	Lake Michigan	\$0
27	Oakland	\$0
28	St. Clair	\$0
	Total	\$198,117,700

**Northwestern Michigan College
Innovation Center - Phase 2
West Hall Renovation and Addition - Simulation/Learn Lab**

Draft

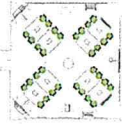
Preliminary Cost Estimate

September 2015

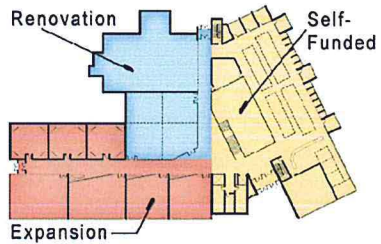
Construction Estimate		\$/SF	Gross Area (SF)	Cost Sub-Totals
New Addition		\$220 /s.f.	18,000	\$3,960,000
Renovation		\$158	20,000	\$3,160,000
	Sub-totals		38,000	\$7,120,000
Site Improvements	15%			\$1,068,000
General Requirements (Permits, Insurances Fees, Etc.)	10%			\$712,000
Design Contingency	15%			\$1,068,000
Construction Contingency	10%			\$712,000
Construction Cost		\$281 /s.f.		\$10,680,000
Associated Project Costs				
Professional Fees (A/E, Legal, Survey, etc.)				\$854,400
DTMB Fee				\$250,000
Other (Asbestos, etc.)				\$100,000
Furniture, Fixtures and Equipment				
Furniture				\$1,500,000
Technology				\$1,000,000
Commissioning				\$40,000
Security				\$75,000
Associated Project Costs		\$101 /s.f.		\$3,819,400
Total Estimated Project Cost		\$382 /s.f.		\$14,499,400



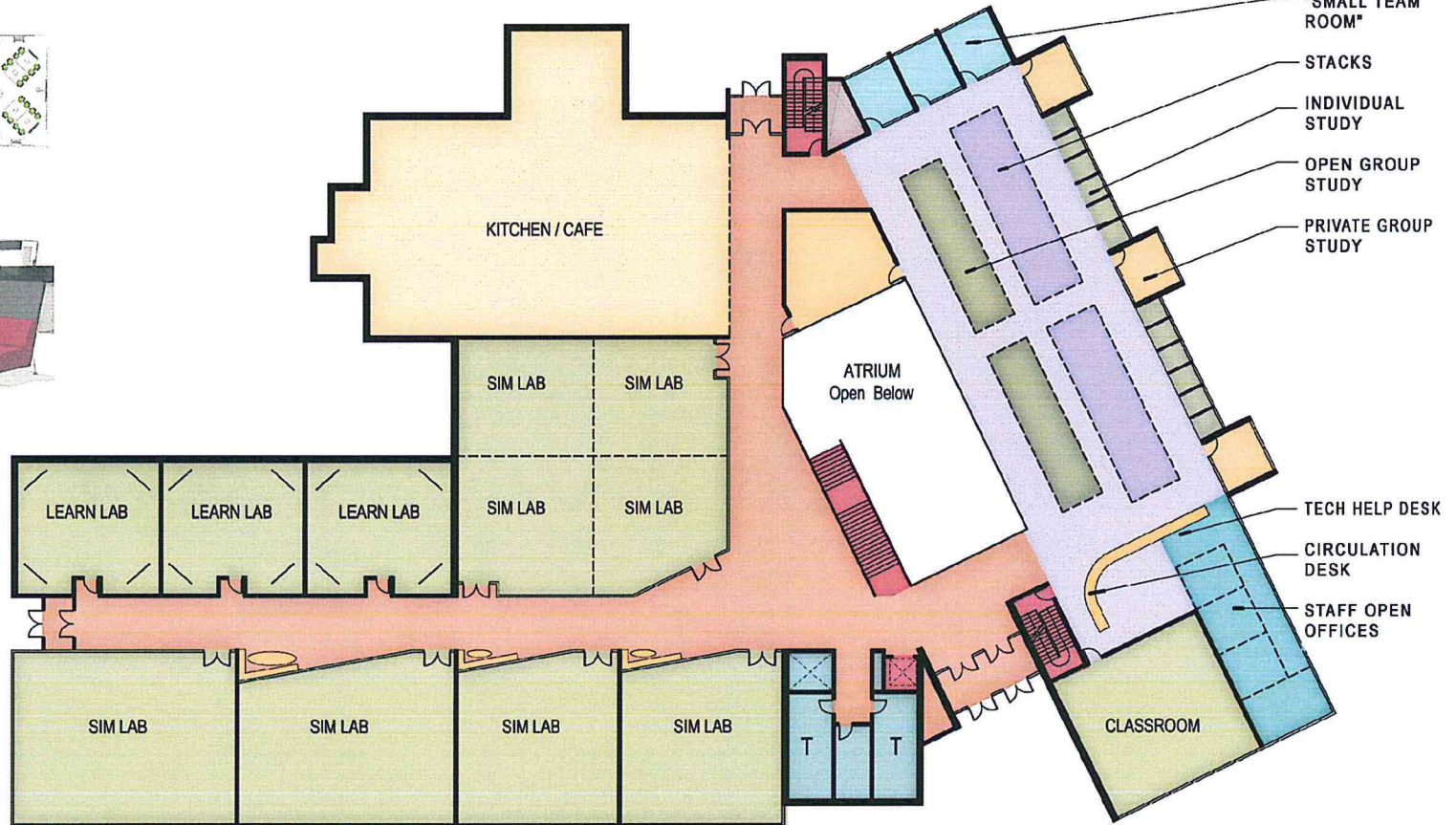
LEARNING LAB



OPEN GROUP STUDY



KEY PLAN



FIRST FLOOR PLAN