ON THE COMPONENTS OF A SYLLABUS
PROMOTING STUDENTS’ SUCCESS

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INTRODUCTION

A syllabus is not only a contract between students and instructors that states the objectives and goals to be achieved at the end of the course, nor is it just a permanent record, nor a set of information of the course structure (Roberts, 2016). A syllabus must be much more! It is the showcase for the course and the first contact between an instructor and students (Calhoon & Becker, 2008). Therefore, it is an excellent way to set the tone for the entire semester, motivate students, arouse their curiosity, and pave the way for a successful semester (Harnish & Bridges, 2011). A syllabus also has to establish the instructor’s expectations in a very clear and quantitative manner (Sulik & Keys, 2014). Moreover, it must foster an inclusive, supportive, and engaging learning community, and model an active learning environment that positively impacts students’ motivation, expectations, and grades (Roberts, 2016). It also has to facilitate the academic success of students, outline student’s responsibilities for their own success, and accurately define a teacher’s duties towards the overall development of students. Additionally, a syllabus describes the material and the activities that support learning inside and outside the classroom (Calhoon & Becker, 2008). It is also imperative that a syllabus embraces diversity, equity, and inclusiveness (Roberts, 2016). Not only do instructors have to provide clear directions and explanations, and promote group activities using the syllabus itself, they have to do it in that first day of class or they miss out on making explicit the efficacy of the syllabus (Roberts, 2016).

With all of that in mind, our hope for this paper is to provide a practical way to create a good syllabus, one that continues to meet needs of students and acts in support of inclusivity as well as one which takes into account guides and structures for students’ success. Doing so, we have tried to outline the iterative process that must go into these kinds of redesigns of a critical course document. This is to provide a guide but also to begin to normalize these kinds of interactions and collaborations between instructors, students, and other support units on a campus — all of which bear success.

It took us two years to come up with the syllabus that we exhibit in this paper. As the coordinator of all precalculus sections at Cal State Los Angeles (about 30 sections each semester), Dr. Hajaiej started collecting data about different aspects of each course in June 2017. We then analyzed the results and closely worked with the Center for Effective Teaching and Learning, the Dean of Undergraduate Studies, and the Director of Smart Start (our First Year Experience office). Combined through several meetings, revisions, and a little extra perspiration, we developed an impressive template syllabus which we shared with all of the instructors in our Precalculus sequence. Surprisingly the literature regarding syllabus design seems to be scant on the details and examples which might be more easily borrowed or used. We hope to change that, as we exhibit our syllabus template, in full, in the next section. We feel, that while there is indeed strong math content here, much of the structure, wording, and organization can be applied to any field. In this way, we consider this article complementary to the celebrated one by Jay Parkes and Mary B. Haris, ‘The purposes of a syllabus’. We complement and extend the goals of what should be in a
syllabus and provide concrete and novel examples that can be used as a model for all other disciplines. At Cal State Los Angeles, this template model has now been used by many other departments through our Center for Effective Teaching and Learning.

We have strong reason to believe that this syllabus played a crucial role in the improvement of our Precalculus courses. Our belief is based on the general trend in pass rates, which went up from 48% to 86% in one year span after we have implemented this syllabus template, which was the only new feature during this period. As this intervention was completely isolated, our above conclusion makes sense. We suspect that as the guide and explicit pacing for the course, it provided a fundamental shift in what expectations were set in coordinated courses for both instructors and students. Based off the works of Hattie, we contend this key feature of a course acts as a locus for Collective Teacher Efficacy (Hattie, 2017). We literally prescribed a positive and growth-focused tone, while strategically providing resources for success to our students.

Additionally, through Dr. Hajaiej’s continued instruction and coordination of the courses, we have been able to get constant feedback about the course and have ensured that the syllabus acts as a teaching tool and living document. The syllabus begins this with our detailed Syllabus Reconnaissance Activity, inspired by our work with the Association of College and University Educators (ACUE), and described last in this paper, to its summation with the progressive refinement in language and structured discourse in the classroom.

Our paper is organized as follows. In the next section, we discuss all the components that a syllabus should contain to promote students’ success. We also provide a justification of the importance of each item. In section 3, we present a concrete example of a syllabus that we created and implemented. Since it was the only change we have made during that period, We have strong reasons to believe that it has contributed to the spectacular improvement of the pass and retention rates at Cal State Los Angeles. In Section 4, for the reader’s convenience, we quote two great teaching practices, namely the ‘syllabus reconnaissance’ and ‘the syllabus scavenger hunt’, borrowed from ACUE. These two activities greatly contribute to the success of any syllabus. The last section of the paper is dedicated to some final remarks.

MATERIAL THAT A SYLLABUS SHOULD CONTAIN: A DISCUSSION

For ease of practice, design, and likely a bit of policy mandate, we encourage you to start a syllabus with general course information, formatted as accessibly as possible. It is very important for students to know how, when, and where they can reach out to their instructors; items which make contact easier can help mitigate loneliness. More importantly, detailed and structured communication, set by a syllabus, can help to reapply an instructor’s presence in their course. Without the advent of interpersonal “check-ins” at the start or conclusion of a live course, communication policies affirm practices which we all know, but need to explicitly apply when online.

There is an interesting additional dynamic we had to contend with while designing the language of the syllabus. Both instructors and students would need to be able to use and take ownership of the document. As with many comprehensive Universities, our Precalculus course is taught by a large number of contingent, or lecturer faculty who take their cues for what’s expected from course items like the syllabus. Thus, the language must act explicitly, while allowing for personality unique to each instructor to come through. For that reason, we consider this syllabus style to follow a “sentence-starter format” by providing a scaffolded language about instruction. This, by a stretch of analogy, works fairly well to describe the underlying draw for writing this paper. Syllabi are certainly of a strange language: they are amalgams of policy, legalese, and a power negotiation between student and instructor (Wasley, 2008; Slattery et al.,
We assert that frameworks for directions and sentence starters help to elevate this often assumed but less-taught area of teaching practice (Albers, 2003). So we tried, with the help of our collaborative team, to develop that scaffolded whole.

Again, in our hopes to alleviate some of the difficulty of the process for our peers, we intend for anyone to use the template provided in section 3 of this paper. Some of the annotations noted are for reference to the parts as we described above, namely “starter language,” with which any instructor could pick up this document and know the expectations for their course. One area not explored and supported completely with this template is subject matter expertise for Mathematics – likely a topic for another paper.

**The Course Description:** A brief course description is a clear description of the most important concepts that students need to master. Of course, the instructor has to make sure that the description is not misinterpreted by students, or so completely full of content as to be alienating. We found that the description of the course is most often neglected. We feel that this is a serious andragogical error. In fact, introducing the field that students are studying, and mentioning the relationship between the material that students will learn and real-world life applications, can arouse their curiosity and pave the way for better interest and applications. Math is an abstract topic for most students, and it is generally not well taught in schools. Connections between students’ hobbies and interests and course material are critical for their success. In Precalculus, we often integrate examples related to economics, sports, arts, cars, etc., so the medium is relatable and the math becomes another way to describe those things the students already know.

With the Course Description, instructors should also take advantage of the syllabus reconnaissance to make it clear that course concepts, e.g. how Calculus can be used in your daily life, are the most pertinent, but that to master those, students will need to have a deep knowledge of the other concepts. This would be a good source of motivation for students.

**The Course Objectives:** We strongly believe that course objectives and outcomes are crucial for a syllabus to be helpful and effective. They need to clearly establish the course expectations. As the foundation for Alignment and quality course work described by entities like QM, we feel it might make more sense to frame the outcomes in another light. They have to be SMART: Specific, Measurable, Achievable, Relevant, and must be accomplished within a Timeframe. They need to be a combination of lower-order thinking skills and higher-order thinking skills, ranging from remembering, understanding, and applying to analyzing, evaluating, and creating. This balance of the relative Bloom’s level, combined with the SMART framework, keeps the language used approachable for students and instructors alike.

**Attitudinal Goals:** An awesome way to motivate students is to list attitude goals in the syllabus. This way, students will know exactly what their instructor expects from them and what should be their approach and attitude to succeed. Framing this positively and towards the community of the course is one of those necessary strategies in setting the tone.

**Course Structure:** The course structure has information that students need regarding the textbook, homework, labsheets, worksheets, or any other material needed in class. Interestingly enough though, we discovered that rather than an overly lengthy section of description, a brief statement of the general structure served as enough information, because the later Pacing Guide provided enough rich context for organization to come through.

**Student Responsibilities**: It is important to outline students’ responsibilities for success. Based on some internal surveys and conversations with students, it turned out that most of our students at Cal State Los Angeles think that it is the instructor’s responsibility to make sure that they are aware about an exam or a classroom change. Some students think that when they are absent, they are not responsible for
announcements made that day. Instructors need to help students transition if it is their first year in college. Writing a paragraph addressing all these issues is a good way to achieve this goal and a powerful tool to help students succeed.

Rights of the Learner: The syllabus is also the best place to clearly define the classroom rules as this leads to setting the boundaries of the class community. It is important that every student feels that the instructor truly cares for students’ well-being and success. A good activity to consolidate that is to have a student read it aloud and have a class discussion about all points mentioned in the “Rights of the Learner.” Instructors can further put emphasis on the most important aspects to have a greater classroom community.

Classroom Community: Commitment to the Learning Community is very important. Our classrooms at Cal State Los Angeles are very diverse. Instructors have to make sure that everyone will respect each other. They must model their behavior that way, but can certainly gain a reminder from a whole statement towards Classroom Community. Some students will get along with others, and some will even become friends. Teachers have to promote all these important social aspects in the classroom.

Rights for the Learner, Classroom Community and Commitment of the Learning Community are complementary and have contributed a lot in the success of Precalculus students at Cal State Los Angeles. After their incorporation in the syllabus, we noticed that students were participating more, asking more questions in all precalculus sections, and generally were being more positive and confident. They were also interacting more and working more effectively together. They were more engaged in the learning process. This was also a crucial point in building a community inside and outside the classroom.

We usually ask a student to read the Community Sections aloud, and we have a class discussion on it on the first day of class. We believe that this activity has always been beneficial to all students, but this has to be absolutely incorporated in classes where there is a higher percentage of “underprepared students.” These students, often unduly categorized, have had an anxiety towards the material and discipline of mathematics or any other field where students tend to struggle. Often, they have not felt comfortable asking questions or participating in an activity, and they usually have fixed mindsets, especially since many of them have been told that they are not good at Math. Letting them clearly know that they have the right to make mistakes and that failure is an essential step for success helps to change their mindset. Again, this is where we provided a statement as best as we could.

Assignments and Grading Policy: A syllabus has to mention the weightage allotted to different units and topics. Knowing these weights, students may form a strategy on how to prepare for topics with high or low percentages. While it might be frowned upon initially, letting students devise their own time commitment strategy to the sections lets them own more of their learning. This is to be encouraged.

To that, the grade distribution is also a keen point of feedback and interaction between students and instructors. The choice of the mandatory activities was based on the Dr. Hajaiej’s data collection and analysis during the first year of coordination at Cal State Los Angeles in 2017-2018. More precisely, we collected data about student’s performance in each concept. He then analyzed that and determined the topics of struggle for our students. Finally, he created group activities about these concepts. They were designed to let students discover some important notions by themselves. Our group activities were effective because they were given weight and therefore priority.

These activities were also designed to help students construct their own understanding, rather than use ‘the method’ from a toolkit. Students analyze and evaluate, and they are also given a chance to create. For all in-class activities, the instructor has to make it clear that students won’t be graded on correctness but on participation, involvement, and perseverance. We found that these instructions decrease the level of anxiety students face and encourage them to be more engaged.
When assigning students to groups, we usually had them work in groups of two or three. These groups were specifically formed based on student’s previous interactions and demonstrated ability within the first few weeks. From there, during any group activity, the instructor has to be extremely positive and encouraging, and must never deprive groups the pleasure of finding the solution or part of it. They should be walking around, questioning students but never providing answers, only asking for more clarification of what brought the group to this point. Our goal is to have critical thinkers instead of a passive audience.

**Course Pacing Guide:** The syllabus for any particular course describes the topics and concepts to be covered while preparing for the examinations for that particular course. The Pacing guide is one of the most important pieces of information for students—but also for instructors. Giving everyone a “roadmap” for content helps to keep a balance between learning and coverage. Students usually want to know where they are at, and the dates of exams and reviews. They feel more comfortable having all this information from day one (and even before). In the example provided, GA stands for the in-class activities we discussed previously.

**Your Next Math Class:** A pacing guide helps us see where we are going in a semester, and we have also found that helping to connect to the next math class for students and discussing this with them is surprisingly powerful. This is doubly beneficial for students: it helps to automatically project themselves in the future and helps them be more positive and motivated. This can change their mindset. Additionally, it is a message from the instructor that constitutes a tangible proof that they really care about their success, since they took the time to get this useful information for them. This also will help the students be more dedicated and involved in the learning process.

It would be important to explore and understand the evidence-base for the application of service-learning as an effective pedagogical tool in public health settings and community health education scenarios. As a high-impact practice, it has certainly found empirical support in undergraduate public health education nationally and globally (Mason & Dunens, 2019). Some of the common themes that have emerged to be significant involve community-driven service, consideration of global citizenship, deliberate and demonstrable learning, and continuous and critically reflective practice (McKinnon, Smedley & Evert, 2016). In a hybrid service-learning based course where public health nurses were equipped with service-learning skills in a global setting, improved intra-professional collaboration, and improved competency implementation was observed (Brown, 2017). This reaffirms the impact of service-learning pedagogy on improved learning of curricular content and civic responsibilities across diverse student populations.

**The Syllabus Template**

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**Course Information**

**Instructor Information**

Instructor:<Instructor’s Name>

Office Location:<Office Building -Room No.>

Telephone:(XXX) XXX-XXXX

Email:<Email address>

Office hours:<Days and times>

Class Days/Time:<Days and times>
Classroom:<Building, Room>
Prerequisites: None
GE Category:B4
Course Fees:$22 for online homework with Rover
Final Exam:<TBD>

**Interaction with Instructor**

The Instructor will make every effort to communicate frequently with you through [announcements and postings within Canvas/e-mail]. [Post/e-mail] any questions or comments you have about the course content and/or requirements [include Post location if applicable]. Questions of a more personal nature can be sent to the Instructor via e-mail [.........]

As a student, you should expect to receive assignment feedback and responses to postings within [x] hours or days. The Instructor will [post an announcement/e-mail alerting the students if they will be unavailable for more than a day.]

**Smart Start Learning Community (Proactive Advising and Supplemental Instruction)**

Smart Start is a learning assistance program that provides in and out-of-class support for you. Supplemental Instruction leaders are students like you! They will be in your Early Start math class and work with you and your instructor on activities and assignments. Academic Coaches are also available to help you stay on top of your game by working with you on things like managing your time, talking to your professor, and connecting with university resources.

**Course Description**

This course covers functions, exponential and logarithmic functions; polynomials functions; systems of linear equations; sequences and series including arithmetic and geometric series. This course includes a supported instruction component as required for Math Placement Category II or III.

**Precalculus** is a language for exploring the whole fabric of science. Much of the mathematical concepts of precalculus lie in these connections to the other sciences. The mathematical questions that arise are compelling in part because their answers matter to other disciplines and fields as well as how they help you to think about the world.

**Functions** are the way that describes how quantities are related to one another, and it provides a set of computational and visual tools for exploring those relationships. Usually, we want to understand how quantities are related in the context of a particular problem—it might be in biology, chemistry, or economics. Functions model most of the phenomena in our world ranging from the takeoff of a plane, to the prediction of a population, or the weather. We will also study concrete examples like an infectious disease spreading through a population, and how to calculate an APR, —to see how precalculus emerges and how it is used.

**Course Objectives/Outcomes**

A. Distinguish between a relation and a function and explain all the characteristics of a function
1) Be able to apply the definition of a function
2) Identify domain and range. Interpret in context when appropriate
3) Use function notation to evaluate functions
4) Identify the features of polynomial, rational, exponential, logarithmic functions, and sequences

B. Build New Functions from Existing Functions
1) Use graph transformations
2) Use analytic transformations
3) Interpret the notion of composition
4) Find inverse functions

C. Build and Analyze Graphs
1) Identify the relationship between a function's equation, table and graph
2) Identify or sketch the following key features of a graph: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maxima and minima; symmetries; slope; vertex; and end behavior
3) Create graphs using key features
4) Write the equation of a function given its graph based on the key features
5) Interpret key features of functions in context

D. Apply Algebraic Techniques to
1) Solve equations and inequalities
2) Solve systems of equations
3) Simplify algebraic expressions to analyze functions and graphs
4) Construct arithmetic and geometric sequences
5) Solve word problems

**Mathematical Attitude Goals**
- Encourage collaborative work.
- Empower students to use precalculus as a language and a tool.
- Make students comfortable tackling problems.
- Foster an experimental attitude towards mathematics.
- Develop the sense that understanding concepts arises out of working on problems, not simply from reading the text and imitating its techniques.

The instructor has made every effort to use and apply Bloom’s taxonomy while developing the course-related objectives which align with the module/weekly content objectives. An alignment map is included using “Trello” software (www.trello.com) which clearly demonstrates the alignment between course-module-objectives, which are further aligned with the course activities, and finally the course assessments. This map gives a “visual representation” of the course structure and an overview of course assessments to diverse learners.
COURSE STRUCTURE
Math 1081 consists of Lecture and group activities. The group activity consists of practice activities, work group, and class discussions about concepts.

REQUIRED COURSE MATERIALS

**Required Textbook:**
- **Title:** Precalculus
- **Publisher:** Openstax
- **Website:** [https://openstax.org/details/books/precalculus](https://openstax.org/details/books/precalculus)
- **ISBNs:**
  - **Print:** 1-938168-34-8
  - **Digital:** 1-947172-06-9
  - **iBook:** 0-9986257-5-2
- **Cost:** The electronic textbook is available on Openstax

**Rover**
You will be using Rover, a $22 online system offered through Openstax, to assist with and submit your homework. The platform offers a variety of problems that will help you make connections with other topics and discover real world applications in all modules. Please go to the following link to register into our course.

[INSERT your Rover course URL]

**Calculators**
Scientific calculators are allowed in class. Common models include Texas Instruments TI-30XIIS or Casio FX-300. Both are available for purchase in the University Bookstore and various online retailers.

**Electronics Policy**
Scientific calculators are allowed. Phones and other communication devices will not be allowed during class time. Common models include Texas Instruments TI-30XIIS or Casio FX-300. Both are available for purchase in the University Bookstore and various online retailers.

**Student Responsibilities**
You are responsible for being aware of all announcements that are made in class, such as changes in exam dates, and cancellation of class due to the instructor’s absence. You are still responsible for announcements made on days that you are absent. You should check your X-University email account regularly for information from the instructor and the Department. If you don’t, you could miss out on deadlines or other useful information. Note that you can forward this email account to any other account of your choice.
RIGHTS OF THE LEARNER
As a student in this class, you have the right:
(1) to be confused,
(2) to make a mistake and to revise your thinking, discuss your findings with your classmates or your instructor
(3) to speak, listen, and be heard, and
(4) to enjoy doing mathematics.

CLASSROOM COMMUNITY
Each student in this class is vital to the success of the classroom community, which is why it is important that we all respect each other, carefully consider one another’s ideas, and value each other’s contributions. All students are equally welcome and valued in this class, regardless of background, identity, or beliefs. Hate, racism, sexism, and other forms of discrimination (implicit and explicit) are immoral and have no place in this community. As your instructor, I will do my best to foster a culture of equity and justice in this class and in the school as a whole. By joining this classroom community you are committing to taking a growth mindset to this work, which means we will work together to learn from each other and become more compassionate.

COMMITMENT TO THE LEARNING COMMUNITY
In our classroom, diversity and individual differences are respected, appreciated, and recognized as a source of strength. Students in this class are encouraged and expected to speak up and participate during class and to carefully and respectfully listen to each other. Every member of this class must show respect for every other member. Any attitudes or actions that are destructive to the sense of community that we strive to create are not welcome and will not be tolerated. In summary: Be good to each other.

ASSIGNMENTS AND GRADING POLICY
ASSIGMENTS
In-Class Activities (25%): In-class participation is important and part of the learning process. First, in order to participate in learning, you must be present. Do not be more than ten minutes late or leave more than ten minutes before the end of the class. In-class activities include sharing ideas and thoughts with the class through activities like: think-pair shares, exit or entrance tickets, one-minute papers, group activities, etc. You do not have to be correct to be participating. Everyone needs to embrace mistakes as learning opportunities. You will earn points from weekly in-class activity. Also, 5 worksheets from in-class group activities about:
1. Functions
2. Inverse and composition of functions
3. Exponential Functions
4. Logarithmic Functions
5. Review summary of selected topics will be collected and graded throughout the semester. The total weight of these worksheets is 15%
**Homework (15%)**: Homework assignments are posted on the course page on Rover. Feel free to use the online resources when you do online homework. You are expected to complete each online homework assignment before it is due. The homework will be graded online (and uploaded to Canvas).

**Quizzes (10%)**: A minimum of 5 quizzes will be given throughout the semester if time permits. These are to help us check-in on certain key concepts throughout the course. Refer to the course schedule for the dates and times.

**Midterms (30%)**: There are 3 midterms scheduled for the course. A study guide and a practice problem set will be given before each midterm. Check the course schedule for the dates and times.

**Final Exam (20%)**: The final exam is a cumulative exam and will be graded collaboratively. Check your get account for the classroom, date and time later.

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**Grading Criteria**

The following is a breakdown of the weights of course components.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Class Activities</td>
<td>25%</td>
</tr>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Midterms</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

The following letter grades are guaranteed for each corresponding percent range:

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutoff</td>
<td>93%</td>
<td>90%</td>
<td>87%</td>
<td>83%</td>
<td>80%</td>
<td>77%</td>
<td>70%</td>
<td>Below 70%</td>
</tr>
</tbody>
</table>

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**Course Pacing Guide**

<table>
<thead>
<tr>
<th>Week</th>
<th>In-Class Group Activity (Do This Before Lecture)</th>
<th>Topic</th>
<th>Reference From Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Monday, 1/20, Martin Luther King Jr. Day</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Syllabus Reconnassabece; Introduction to Rover + Knowledge Survey (homework)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complex Numbers</td>
<td></td>
<td>PreCalculus 3.1</td>
</tr>
<tr>
<td>Week</td>
<td>Topic</td>
<td></td>
<td></td>
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<td>------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Systems of equations 2x2</td>
<td>PreCalculus 9.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IN CLASS GA 1</strong> Characteristics of Functions</td>
<td>PreCalculus 1.1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Quiz 1</td>
<td>PreCalculus 1.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Domain and Range</td>
<td>PreCalculus 1.2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Function Operations</td>
<td>PreCalculus 1.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IN CLASS GA 2 PART 1</strong> Composition</td>
<td>PreCalculus 1.4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Quiz 2</td>
<td>PreCalculus 1.4</td>
<td></td>
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<tr>
<td></td>
<td>Catch up or Review</td>
<td>PreCalculus 1.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Midterm 1 (50 min)</strong></td>
<td>PreCalculus 1.4</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Transformations of Functions</td>
<td>PreCalculus 1.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadratic Functions</td>
<td>PreCalculus 3.2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Quiz 3</td>
<td>PreCalculus 3.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power Functions and Polynomial Functions</td>
<td>PreCalculus 3.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graphs of Polynomial Functions [end behavior and multiplicity only]</td>
<td>PreCalculus 3.4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Quiz 4</td>
<td>PreCalculus 3.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finding Zeros of Polynomial Functions (factorable polynomials only)</td>
<td>PreCalculus 3.6</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Catch up or Review</td>
<td>PreCalculus 3.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Midterm 2 (50 min)</strong></td>
<td>PreCalculus 3.6</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td><strong>IN CLASS GA 2 PART 2</strong> Inverse Functions</td>
<td>PreCalculus 1.7</td>
<td></td>
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<tr>
<td></td>
<td>Exponential Functions</td>
<td>PreCalculus 4.1</td>
<td></td>
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<tr>
<td></td>
<td><strong>IN CLASS GA 3</strong> Graphs of Exponential Functions</td>
<td>PreCalculus 4.2</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td><strong>Spring Break</strong></td>
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<tr>
<td>12</td>
<td>Quiz 5</td>
<td>PreCalculus 4.3</td>
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<td></td>
<td>Logarithmic Functions</td>
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<td>Graphs of Logarithmic Functions</td>
<td>PreCalculus 4.4</td>
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<td>Properties of Logarithms</td>
<td>PreCalculus 4.5</td>
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<td>13</td>
<td>Exponential and Logarithmic Equations Part 1</td>
<td>PreCalculus 4.6</td>
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<tr>
<td></td>
<td>Exponential and Logarithmic Equations Part 2</td>
<td>PreCalculus 4.6</td>
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<td>14</td>
<td>Quiz 6</td>
<td>PreCalculus 11.1</td>
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<td>Sequences</td>
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<td></td>
<td>Arithmetic Sequences</td>
<td>PreCalculus 11.2</td>
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<tr>
<td>15</td>
<td>Catch up or Review</td>
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<td>Midterm 3 (50 min)</td>
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<tr>
<td>16</td>
<td>Geometric Sequences</td>
<td>PreCalculus 11.3</td>
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<td>Quiz 7</td>
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<td>Review</td>
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<td>17</td>
<td>Final (May 11-16; Date TBD)</td>
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</table>

**UNIVERSITY POLICIES**

Some of the tips for faculty new to service-learning or its use in online courses would be as follows:

**STUDENT HANDBOOK**

Information on student rights and responsibilities, academic honesty, standards of conduct, etc., can be found in Schedule of Classes for the current quarter visit the X-University ..... under Policies and Procedures.

**DROPPING AND ADDING**

You are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. You should be aware of the current deadlines and penalties for adding and dropping classes by visiting the .......... (Registrar news and information).

**REASONABLE ACCOMMODATION**

Reasonable accommodation will be provided to any student with a documented disability who is registered with the Office for Students with Disabilities (OSD) and who requests needed accommodation. The OSD website ..... 

**ACADEMIC DISHONESTY**

Cheating is not tolerated; if you are caught, you will be referred to the Student Conduct Officer for disciplinary action in accordance with university policy pertaining to academic dishonesty. These policies can be found in the university catalog in...... You are encouraged to study together and help one another.
on homework and the signature assignments, but the work you hand in must be your own. You may use a scientific calculator on quizzes, midterms, and the final (and, indeed, one is required), but books, notes, graphing calculators, cell phones, and other electronic devices are prohibited.

**IMPORTANT DATES**

First day of instruction: January 21
Last day for students to add or drop a course: February 4.
Withdrawal with a W: February 5 – April 24
No classes: Spring Break: March 30-April 5.
Last day of instruction: May 9

**YOUR NEXT MATH CLASS**

Your next math class after you pass Math 1081 will depend on your major:

<table>
<thead>
<tr>
<th>If your major is...</th>
<th>...then you should take...</th>
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</thead>
<tbody>
<tr>
<td>Chemistry and Biochemistry (Biochemistry, B.S.; Bioinformatics and Computational Biology Minor; Chemistry, B.S.) Civil Engineering (Civil Engineering, B.S.) Computer Science (Computer Science, B.S.) Electrical Engineering (Electrical Engineering, B.S.) ECST (Engineering with Special Options, B.S.) Geosciences and Environment (Geology, B.S., Geology Option; Geology, B.S., Environmental Geosciences Option) Kinesiology &amp; Nutritional Science (Food Science &amp; Technology, B.S.) Mathematics (Mathematics, B.S.) Mechanical Engineering (Mechanical Engineering, B.S.) Natural Science (Options I and II, not biology emphasis) Physics and Astronomy (all programs)</td>
<td>MATH 1083</td>
</tr>
<tr>
<td>Biological Sciences (Biology, B.S.; Microbiology, B.S.) Kinesiology and Nutritional Science (Exercise Science, B.S.) Natural Science (biology emphasis, or Option III)</td>
<td>MATH 1085</td>
</tr>
<tr>
<td>Kinesiology and Nutritional Science (Kinesiology, B.S.) Technology (Industrial Technology, B.S.)</td>
<td>Passing Math 1081 fulfills the math requirement for your major.</td>
</tr>
</tbody>
</table>
SYLLABUS RECONNAISSANCE ACTIVITY: LETTING THE SYLLABUS BE MORE THAN A DOCUMENT

As mentioned in the Introduction, a great syllabus won’t be as effective as the instructor wants if no activity about the syllabus is implemented in the first day of class. For readers’ convenience, the following paragraph explains all steps to have a great syllabus activity. For more about this process, please explore the ACUE site: https://acue.org/courses/modules/preparing-an-effective-syllabus/

A) SYLLABUS RECONNAISSANCE

1. Hand out the syllabus and tell students they will be doing a reconnaissance of it. Ask students if and where they’ve heard the term reconnaissance before and share the definition.
2. Tell students that they will have 10 minutes. They should spend the first 2–3 minutes quickly scanning the syllabus, highlighting or underlining key points. Then they should read through the entire syllabus and place a star next to five important facts.
3. Have students form small groups to share their selections and compare them to their groupmates’ selections.
4. Finally, generate a whole class list of the important facts. Discuss them and identify any important information that wasn’t mentioned.

B) SYLLABUS SCAVENGER HUNT

1. Divide the class into small groups or pairs.
2. Provide each group with a handout that lists questions they will need to answer by reviewing the syllabus. The questions should reflect what you believe to be the most important information for them to know at this point. Questions might include the following: What is the attendance policy for the course? How can you get in touch with your instructor? When is the first assignment due? You might also ask questions that require students to consider their goals, such as “Of the listed objectives for this course, which one interests your group the most and why?”
3. Review the correct answers with the whole class. Ask students to share any questions they have about the syllabus that may not have been answered during the activity.

Optional: You can have the groups race to finish the scavenger hunt and award a prize to the team who answers the most questions correctly.

FINAL REMARKS

When the Dr. Hajaiej started the redesign of Precalculus courses in June 2017, he thought that he would be able to find a great syllabus template ‘ready to use’. After reading hundreds of syllabi, he found out that many crucial components were most often neglected. Surprisingly, the literature regarding syllabus design seems to be scant on the details and examples which might be more easily borrowed or used. As we exhibited our syllabus template here, we hope that it is now more ‘ready to use.’ Understanding, that while there is math content, much of the structure, wording, and organization can be applied to any field.

We spent two years coming up with the model discussed in Section 3. Seeing the great success that our syllabus template had at Cal State Los Angeles, we wanted to share this document, as well as our findings, with a much larger community of educators. In our hopes to alleviate some of the difficulty of the process for our peers, we have provided the entire Syllabus Template with very detailed comments. We are glad to share a detailed and practical way to create a good and complete syllabus, which takes into account all guides and structures for students’ success. Our Syllabus has drastically contributed to students’ success.
and retention increase at Cal State Los Angeles. We are confident that its implementation in other campuses will also be as successful as ours provided that good teaching practices, as described in Section 2, are also promoted.

REFERENCES


Sulik, G., & Keys, J. (2014). “Many students really do not yet know how to behave!” The syllabus as a tool for socialization. Teaching Sociology, 42(2) 151–160.