

HARVARD UNIVERSITY
Information Technology
STUDENT INFORMATION SYSTEM

Delivering a First-Class PeopleSoft User Experience for My.Harvard

Higher Education User Group

Alliance Conference 2016

March 7, 2016

Session #35504

Agenda

- Harvard Context
- General Approach
- Courses – Objectives, Approach, Outcomes
- Students – Objectives, Approach, Outcomes
- Faculty / Advisors – Objectives, Approach, Outcomes
- Lessons Learned

My.Harvard Implementation

- Project announced May 2013
- Partners: Sierra-Cedar, IntraSee, Performance Architects
- Phased implementation:
  - November 2014: Campus community data conversion, admissions loads
  - March 2015: Student Financials (all schools) and SIA Data Warehouse
  - Summer 2015: Harvard College, Graduate School of Arts & Sciences, and Harvard Divinity School (11K Students, 4K faculty/staff)
  - Summer 2016: Harvard Chan School of Public Health, Harvard Kennedy School, Graduate School of Design, and Graduate School of Education (4K students, 500 faculty/staff, but four separate business processes!)
- Product Scope:
  - Campus Solutions
  - Interaction Hub for enhanced branding and modern style
  - Student Information Analytics (SIA) with OBIEE & Exalytics

User Experience Objectives and Context

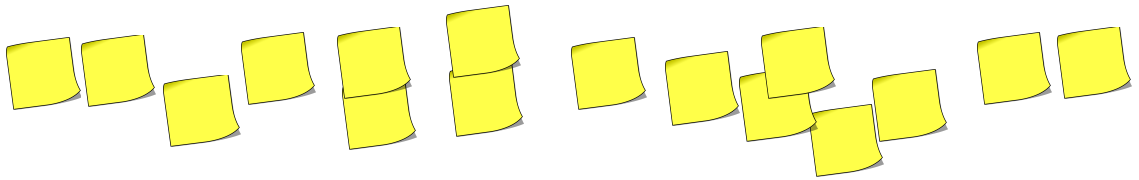
- Project included a **mandate to deliver a user-friendly portal** for faculty and advisors, but no technology decision was made at first
- Users **had not responded favorably** to delivered PeopleSoft UI
- Harvard **did not have a user experience practice**
- **Design patterns** had recently been standardized for web publishing and guidelines could be extended to applications
- **Scope was not clearly defined**, but 20+ existing systems needed to be replaced and users expected parity
- Solution would need to flexibly accommodate **phased on-boarding** of schools over 3-4 years
- For the first time, there would be a single platform to support advising and student services across schools; **previously all schools had their own faculty/student portals**

User Experience Approach (High Level)

- Selected **PeopleSoft Interaction Hub** to simplify integration and to allow us to use many PeopleSoft self-service components; however, none of the delivered self-service centers were deployed.
- Implemented using an **Agile software development** methodology, with 3-4 week sprints, JIRA Agile backlogs, and daily stand-up.
- **Partnered with IntraSee** to implement the portal.
- Focused on **extensibility, flexibility, and frameworks** that support power users managing many aspects of the portal.
- Applied many **branding standards** across all products (CS, iHub, UPK, OBIEE, and OpenScholar website).
- On the administrative side, **implementing work centers** to streamline navigation and manage the usability gap between the portal and Campus Solutions back-office.
- Hired **student "ambassadors"** to help test the user interface and provide feedback on communications.

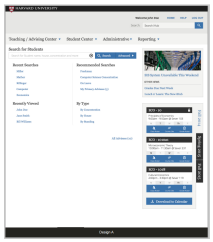
3-2-1 Visual Design Methodology

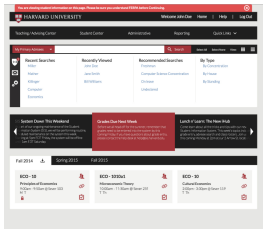
Ideation

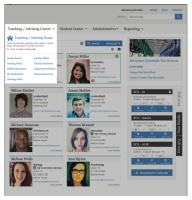


Dozens of complete or component ideas arise from user research.

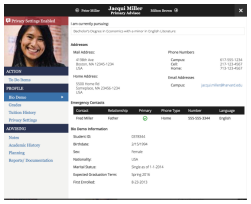
Three Complete Low Fidelity Prototype Concepts

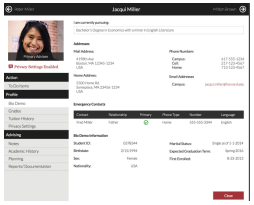




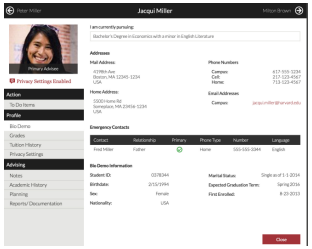


Two Medium Fidelity Concepts





Single High Fidelity Design



Lessons Learned

- Agile can be very effective but it is a steep learning curve and can be challenging to manage inter-dependencies.
- Having the right team is key (duh!); in an agile project it is everything!
- Due to our timeline, we sometimes took shortcuts to deliver “MVP”; important to catalog these and circle back and set things right.
- SES requires careful monitoring the more central it becomes to your solution—may be a learning curve for the support team.
- Delta indexes are required to capture changes in the search index throughout the day, but this can get complex in CS.
- Need to align development approach (styles, labels, interactions) and timelines between the Campus Solutions team and the portal team.
- Test, test, test, test…
- “Feedback is a gift” – though it seldom feels that way!
- Most importantly – it is possible to deliver an elegant and modern user experience with PeopleSoft, even without Fluid!

COURSES

Requirements (at a Glance)

- “One box” searching with facets/filters
- Searching multiple class attributes simultaneously
- Support keywords and tagging
- Configurable categories for browsing
- Integrate to book store, Canvas, maps, and course evals

Approach

- PeopleSoft Search Framework (SES)
- Huge connected query to pull 40 data points into index
- IntraSee Search 2.0 product to format results
- No customizations to Campus Solutions
- Many small innovations:
  - Store subject + catalog in multiple ways based on observed user behavior; for example:
    - Campus Solutions data: ECON 10A
    - Index stores as: ECON 10A, ECON10A, ECON10, EC10, EC10A
  - Configurable aliases when system and student vocabulary differ:
    - COMPSI vs. CS
    - APPMTH vs. AM

Outcomes (DEMO)

- Keyword search
- Facets / filters
- Course profile
- Integration Points
- Browse
- Advanced Search

- **NOTE:** Some screenshots are in the Appendix for future reference or if you couldn't attend the live demo!

STUDENTS

Requirements (at a Glance)

- Enroll in classes
- Request limited enrollment classes and pre-requisite overrides
- Enter preferences for secondary components
- View holds and to-do items
- Update personal data
- View grades and unofficial transcripts
- View progress (milestones, AAR)
- View various custom reports, many of which are accessed via web service integration to third-party servers
- Integrate links to key resources within the University
- Rapid navigation to Canvas course sites for courses the user has an association with (“quick links”)

Approach

- Student self-service makes extensive use of delivered self-service pages within a branded framework
- Custom transactional pages typically developed as standard components and exposed through portal front-end
- Course enrollment transactions are initiated via course search
- Extensive use of activity guides for multi-step processes

Outcomes (DEMO)

- Student Home
- Add course, validate, and request permissions
- Personal Info
- Grades and Transcripts
- My Program
- Reports & Documents

- **NOTE:** Some screenshots are in the Appendix for future reference or if you couldn't attend the live demo!

FACULTY / ADVISORS

Requirements (at a Glance)

- One stop for all faculty / advising features
- Broad searching of the student directory
- Enforced security on student details based on advising relationship
- Access detailed student record
- Advisor “signature” required before enrollment
- Log advising notes
- Access course rosters, grading, and pending permissions

Approach

- PeopleSoft Search Framework (SES) to build a student index with all key fields such as name, program, plan, student groups, etc.
- Separate indexes for each career to allow security at highest level
- Classified data within student profile as Level 1, 2, or 3
- Custom security module checks user security level for the student based on advising relationship and role
- IntraSee Data Source Plugin used to define data and menus for the student profile; new data can be integrated via app package or front-end configuration with SQL
- For courses, portal aggregates data but Campus Solutions components used for class roster and grade roster

Outcomes (DEMO)

- Home page overview
- My Advisees & Student Profile
- Student search
- Courses – filters and rosters

- **NOTE:** Some screenshots are in the Appendix for future reference or if you couldn't attend the live demo!

ADMIN USERS

Approach to Admin Users

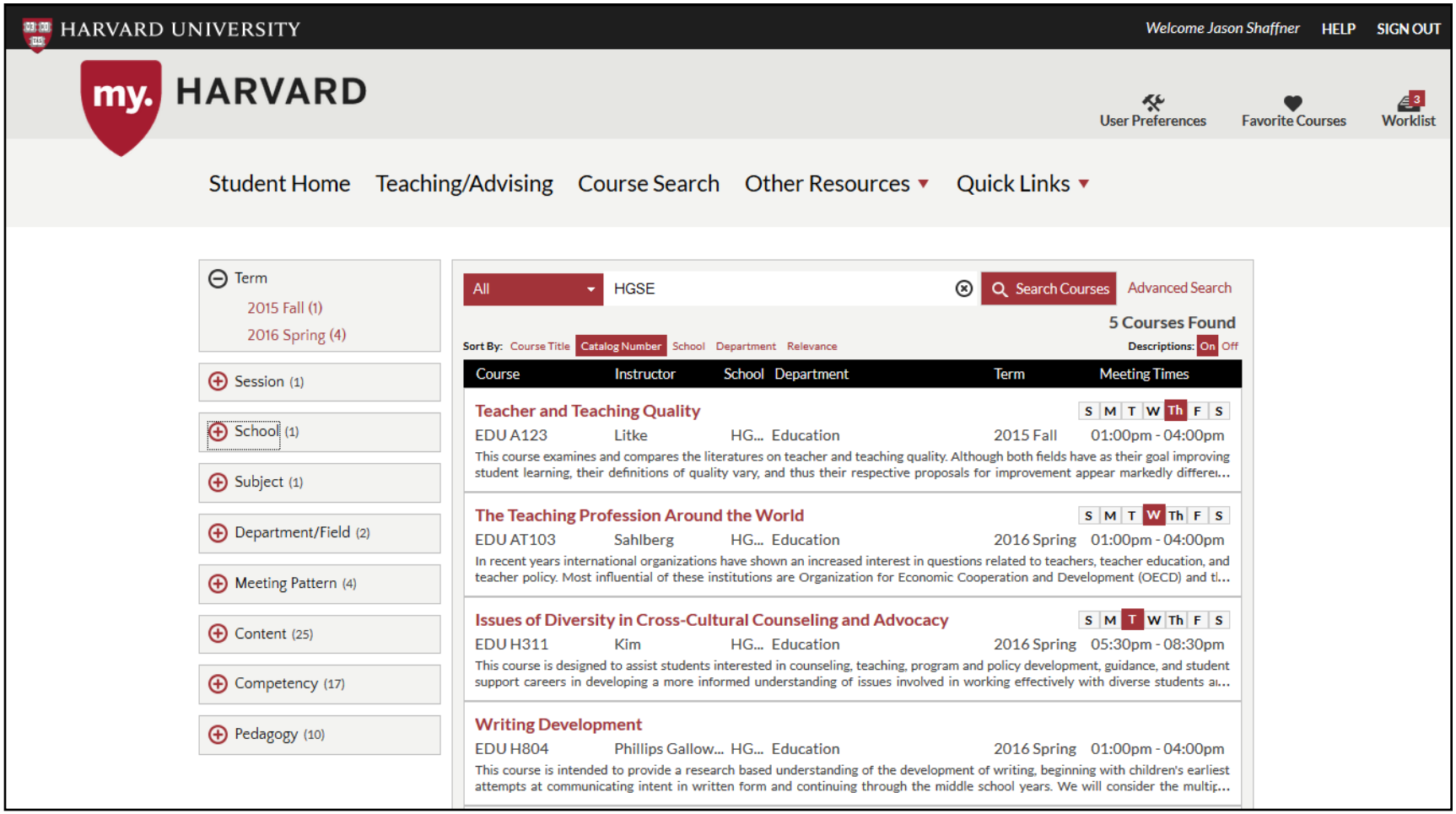
- Many administrative users are also users of the portal and use it to search for students, view student record, and run AAR.
- Limited changes to back-office student administration pages beyond basic branding, but we have embraced Work Centers.
- We are under pressure to increase the number of transactions that can be performed directly from portal such as assigning advisors, updating milestones, waiving degree requirements.
  - Likely first step will be to embed deep links to target CS functions
  - May drive our adoption of Fluid
- Work Centers have proven an excellent tool to organize related tasks and queries; most users access all functions from a single work center. Top gap has been desire for more reports.
- Launch of OBIEE Dashboards to academic departments will be another important shift in terms of usability.

Q&A

Appendix:
Course Screenshots

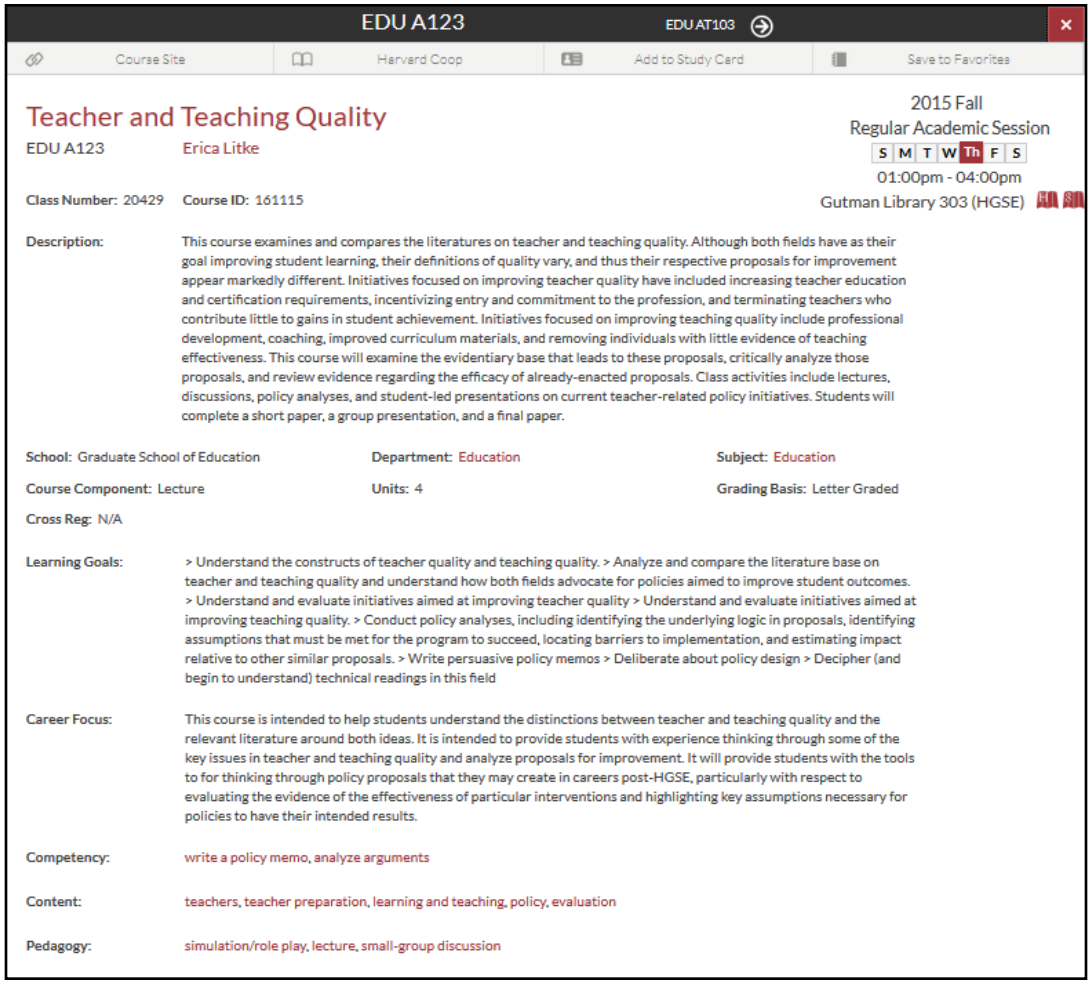
Searching for Courses

The class search engine provides flexibility and power for scholars to find courses that meet their learning objectives.



Course Details

Course profiles provide all details plus links to Canvas, maps, books, enrollment, and favorites.



EDU A123 EDU AT103

Course Site | Harvard Coop | Add to Study Card | Save to Favorites

Teacher and Teaching Quality

EDU A123 Erica Litke

2015 Fall
Regular Academic Session
S M T W Th F S
01:00pm - 04:00pm
Gutman Library 303 (HGSE)

Class Number: 20429 **Course ID:** 161115

Description: This course examines and compares the literatures on teacher and teaching quality. Although both fields have as their goal improving student learning, their definitions of quality vary, and thus their respective proposals for improvement appear markedly different. Initiatives focused on improving teacher quality have included increasing teacher education and certification requirements, incentivizing entry and commitment to the profession, and terminating teachers who contribute little to gains in student achievement. Initiatives focused on improving teaching quality include professional development, coaching, improved curriculum materials, and removing individuals with little evidence of teaching effectiveness. This course will examine the evidentiary base that leads to these proposals, critically analyze those proposals, and review evidence regarding the efficacy of already-enacted proposals. Class activities include lectures, discussions, policy analyses, and student-led presentations on current teacher-related policy initiatives. Students will complete a short paper, a group presentation, and a final paper.

School: Graduate School of Education **Department:** Education **Subject:** Education

Course Component: Lecture **Units:** 4 **Grading Basis:** Letter Graded

Cross Reg: N/A

Learning Goals: > Understand the constructs of teacher quality and teaching quality. > Analyze and compare the literature base on teacher and teaching quality and understand how both fields advocate for policies aimed to improve student outcomes. > Understand and evaluate initiatives aimed at improving teacher quality > Understand and evaluate initiatives aimed at improving teaching quality. > Conduct policy analyses, including identifying the underlying logic in proposals, identifying assumptions that must be met for the program to succeed, locating barriers to implementation, and estimating impact relative to other similar proposals. > Write persuasive policy memos > Deliberate about policy design > Decipher (and begin to understand) technical readings in this field

Career Focus: This course is intended to help students understand the distinctions between teacher and teaching quality and the relevant literature around both ideas. It is intended to provide students with experience thinking through some of the key issues in teacher and teaching quality and analyze proposals for improvement. It will provide students with the tools to for thinking through policy proposals that they may create in careers post-HGSE, particularly with respect to evaluating the evidence of the effectiveness of particular interventions and highlighting key assumptions necessary for policies to have their intended results.

Competency: write a policy memo, analyze arguments

Content: teachers, teacher preparation, learning and teaching, policy, evaluation

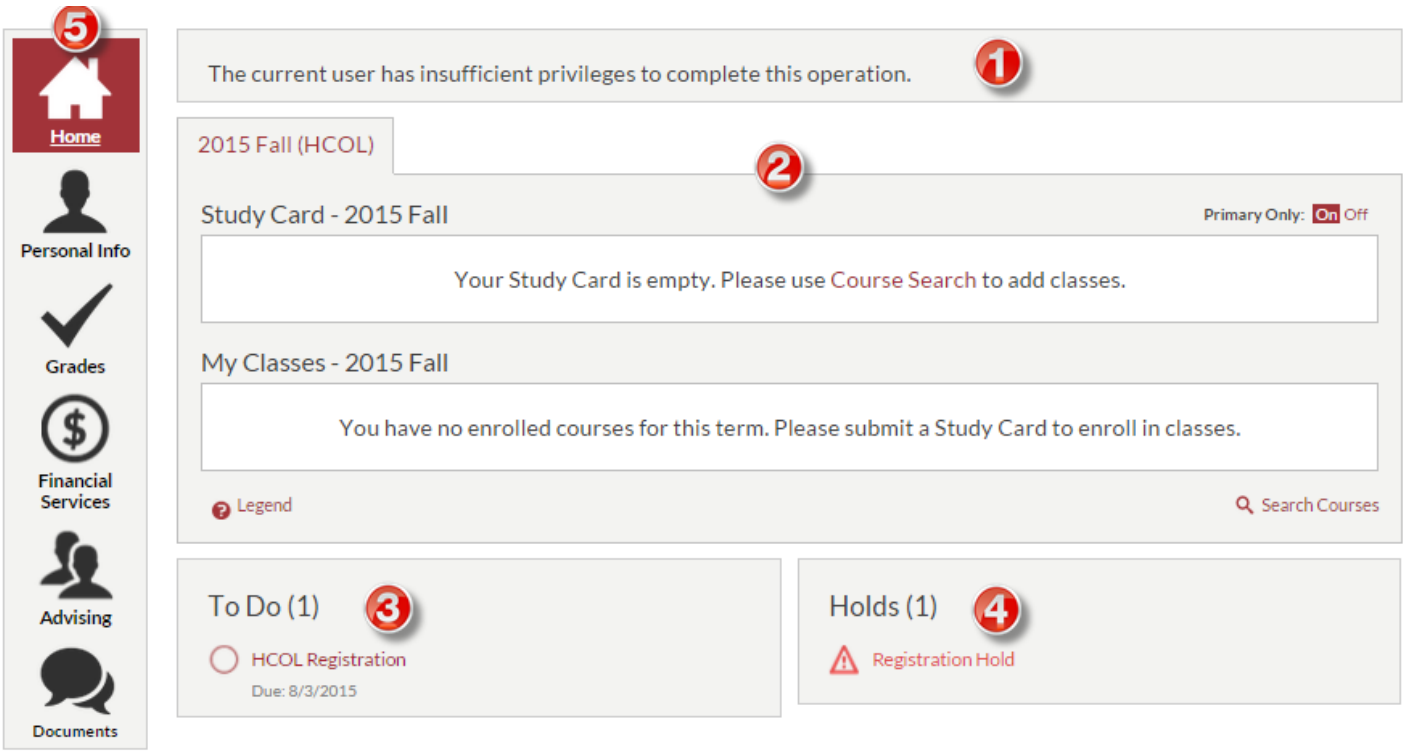
Pedagogy: simulation/role play, lecture, small-group discussion

Advanced Search

Advanced Search remains very popular way for users to target courses meeting specific attributes.

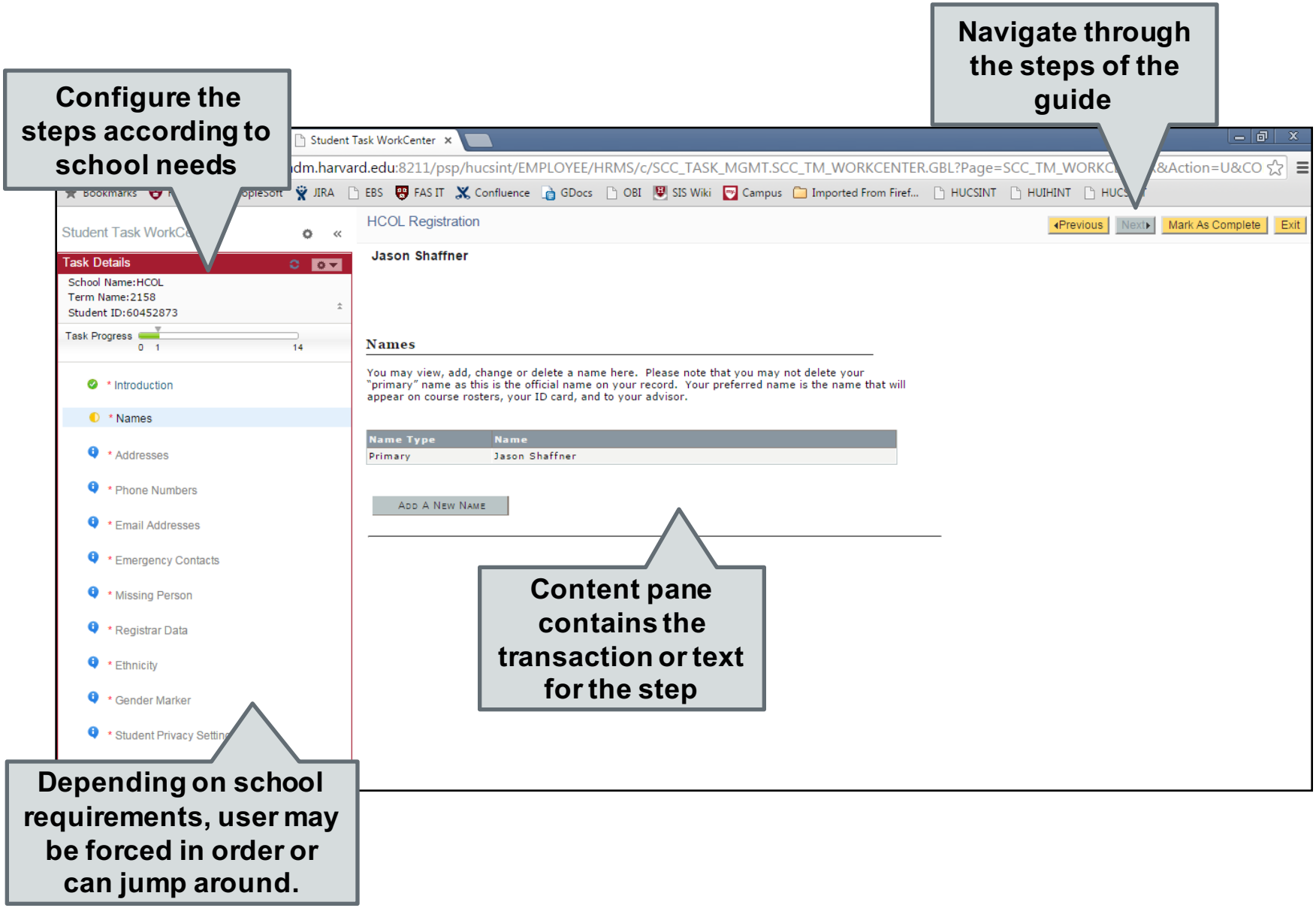
Appendix:
Student Screenshots

Student Home Page

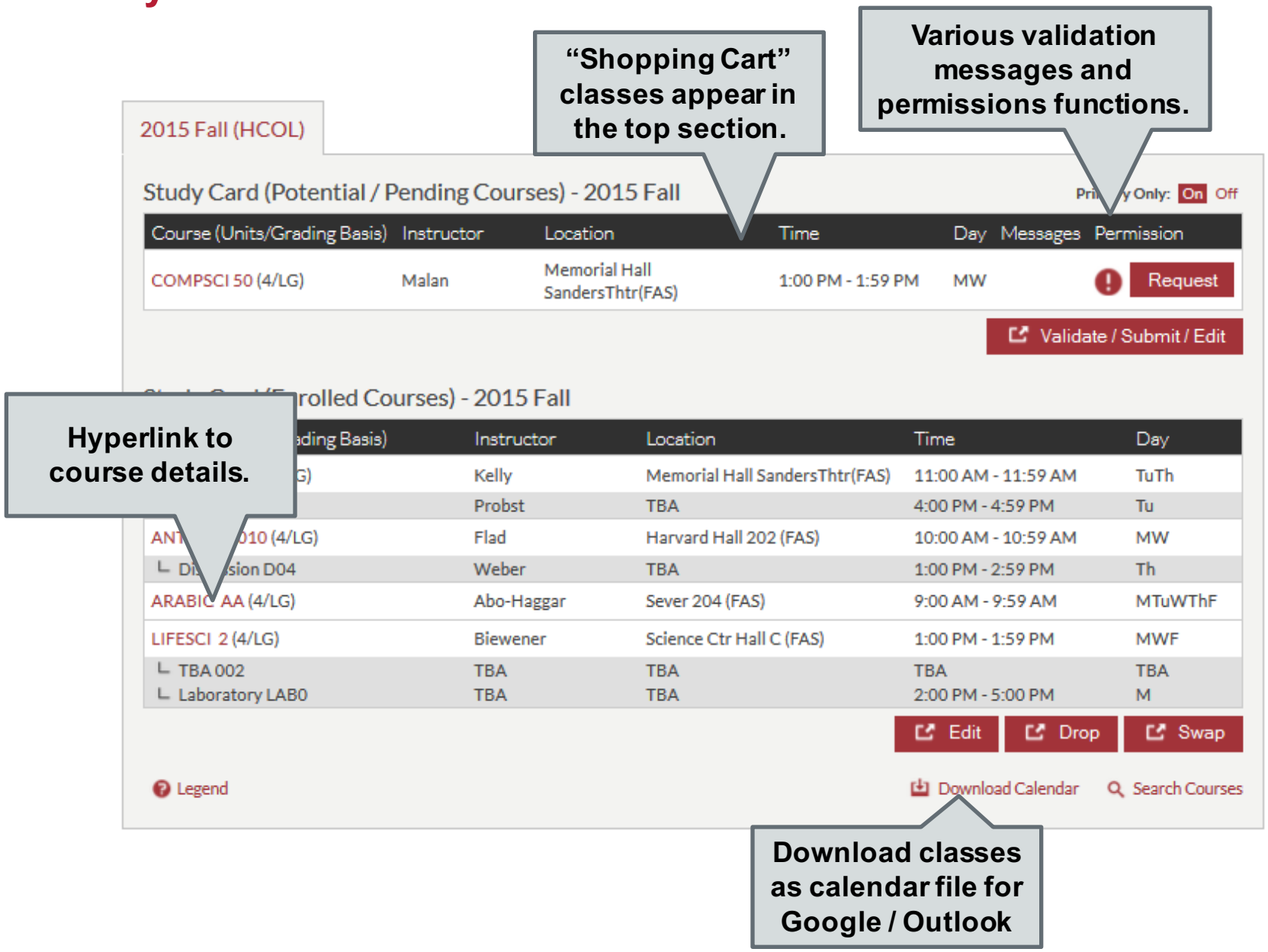


1. News – this section will host news and announcements from the registrar's office, my.harvard product team, and student government. The news feature may expand over time.
2. Study Card & Enrollments – this section will show the potential and actual enrollments.
3. To-Do – lists actions the student must take such as the registration checklist at the start of each term; other items will appear here as we extend the capability to departments.
4. Holds – display conditions that may prevent enrollment, graduation, transcripts, etc. Clicking on the item displays information on how to address the hold and whom to contact with questions.
5. Menu – the available options will expand in coming months as we deploy additional features such as plan of study, "my program", and online degree audit.

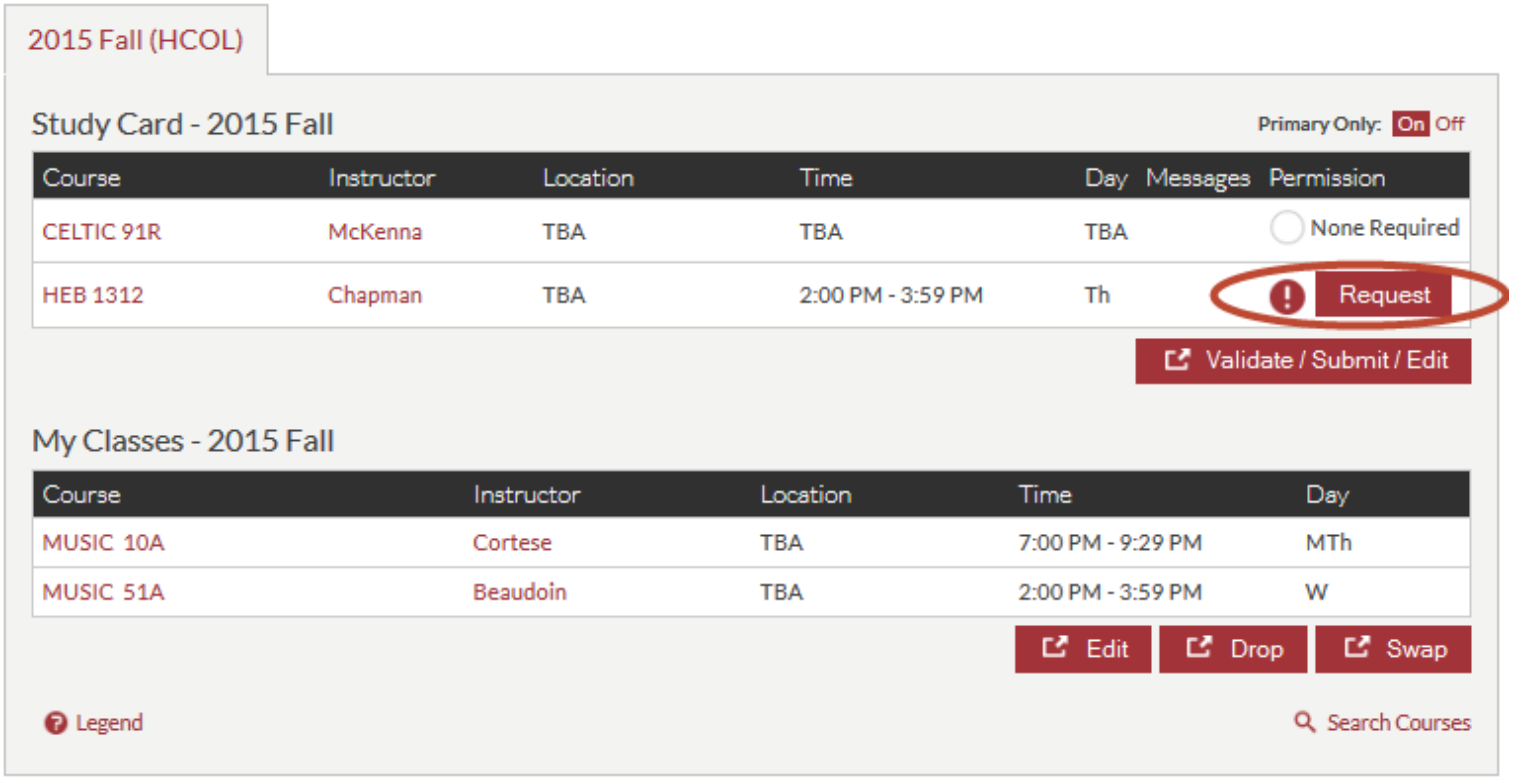
Online Registration - Preview

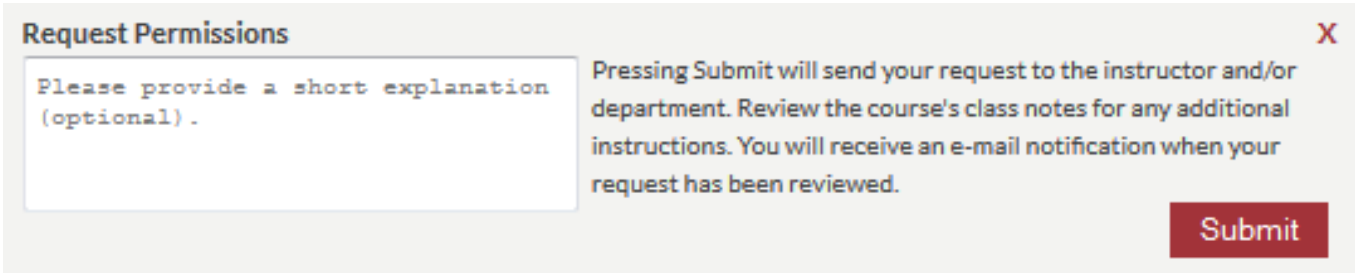


Study Card / Enrollments



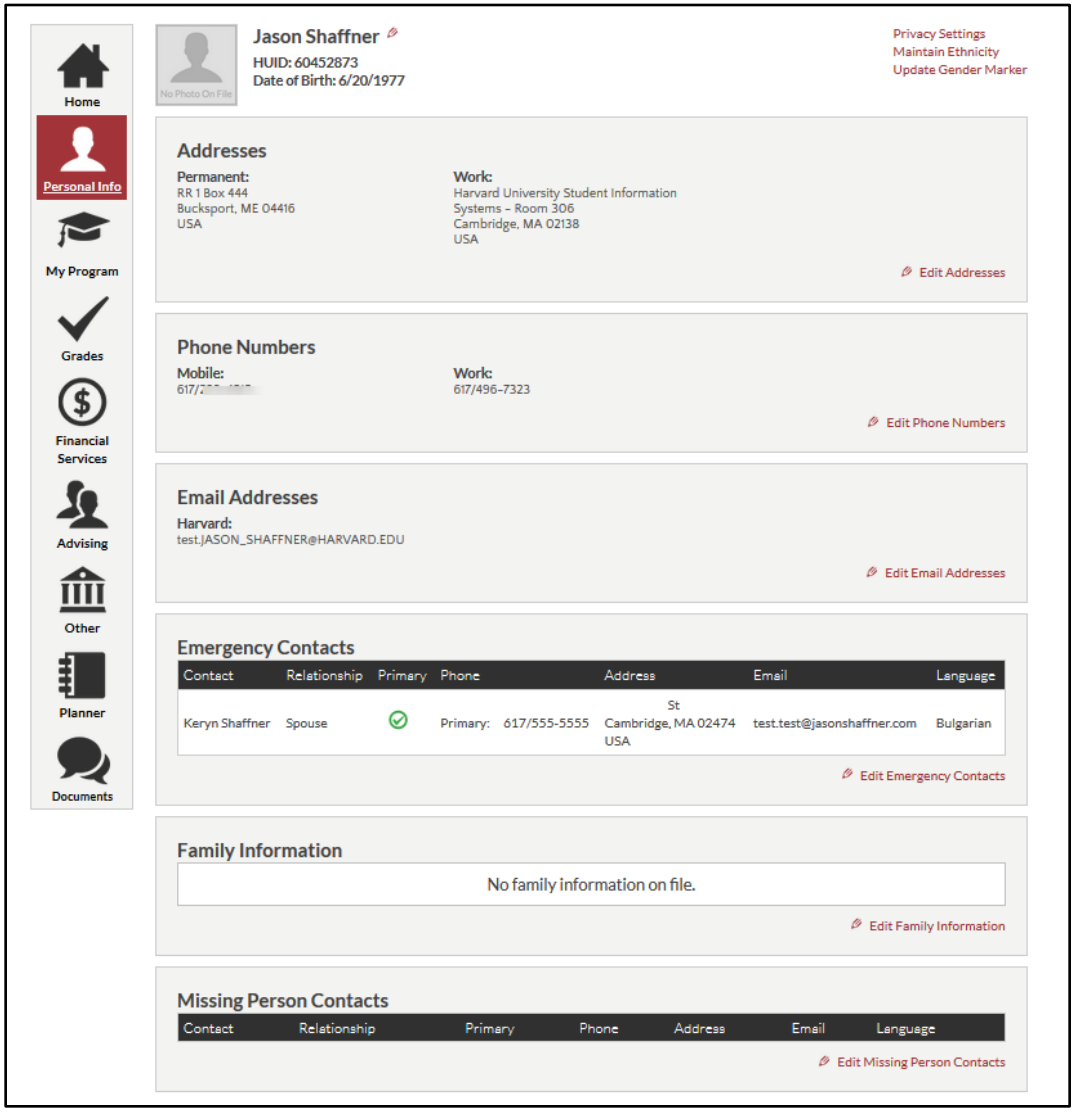
Request Instructor Permission





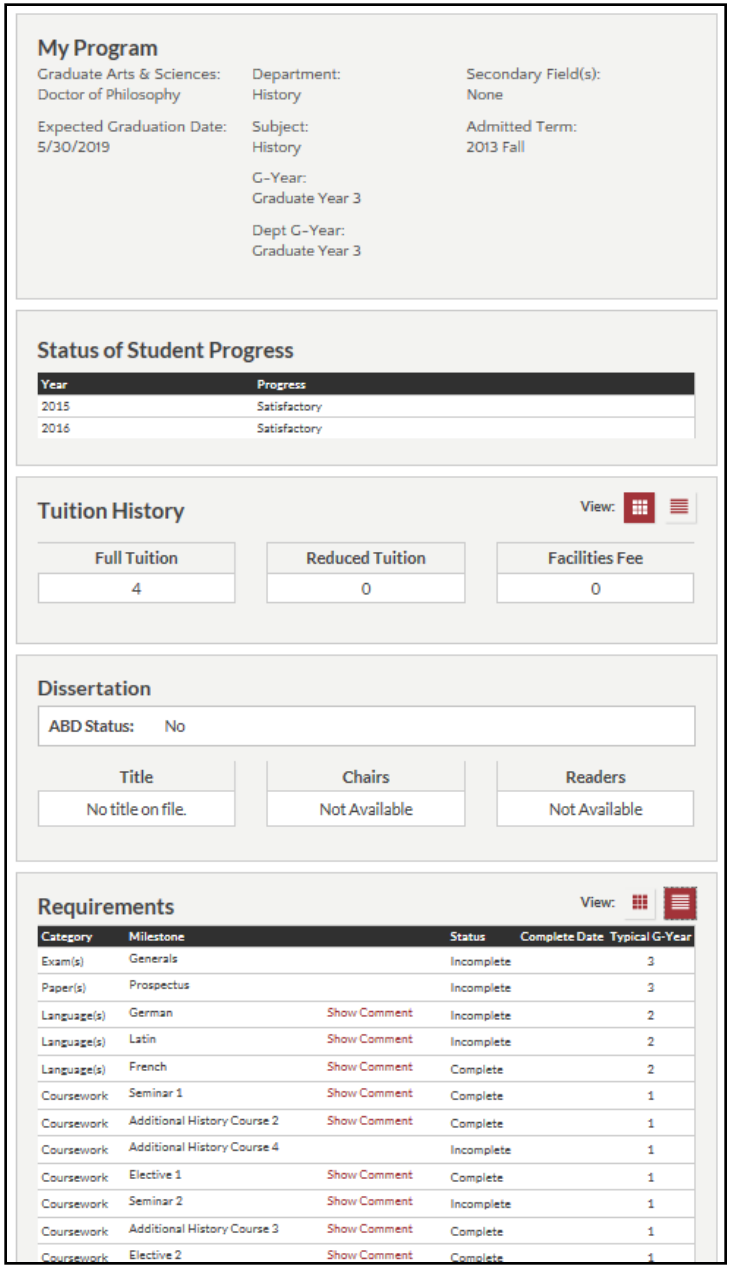
Student Personal Information

- From one page, students can maintain all bio/demo data. Common data for all Wave 1 schools was:
  - Preferred name
  - Address
  - Phone number
  - Personal email
  - Emergency contact
  - Ethnicity
  - Privacy
- Custom data:
  - Missing Persons Contact
  - Gender Marker & pronouns
  - Family
  - Religious Affiliation
- Most edit functions use the standard PeopleSoft self-service pages, with minimal modification



My Program

- This page displays different data for each career / program based on the needs of the program. :
  - Program / Plan / Subplan
  - Expected Grad Date / Term
  - Custom attributes (e.g., social class for Harvard College, Department G-Year for GSAS)
  - Plan of Study (Custom “Planner”)
  - Academic Advisement Report
  - Milestones
- Apply to Graduate and Declare Concentration (HCOL) only transactions at this time



My Program

Graduate Arts & Sciences: Doctor of Philosophy
Department: History
Secondary Field(s): None
Expected Graduation Date: 5/30/2019
Subject: History
Admitted Term: 2013 Fall
G-Year: Graduate Year 3
Dept G-Year: Graduate Year 3

Status of Student Progress

Year	Progress
2015	Satisfactory
2016	Satisfactory

Tuition History

View:

Full Tuition	Reduced Tuition	Facilities Fee
4	0	0

Dissertation

ABD Status: No

Title	Chairs	Readers
No title on file.	Not Available	Not Available

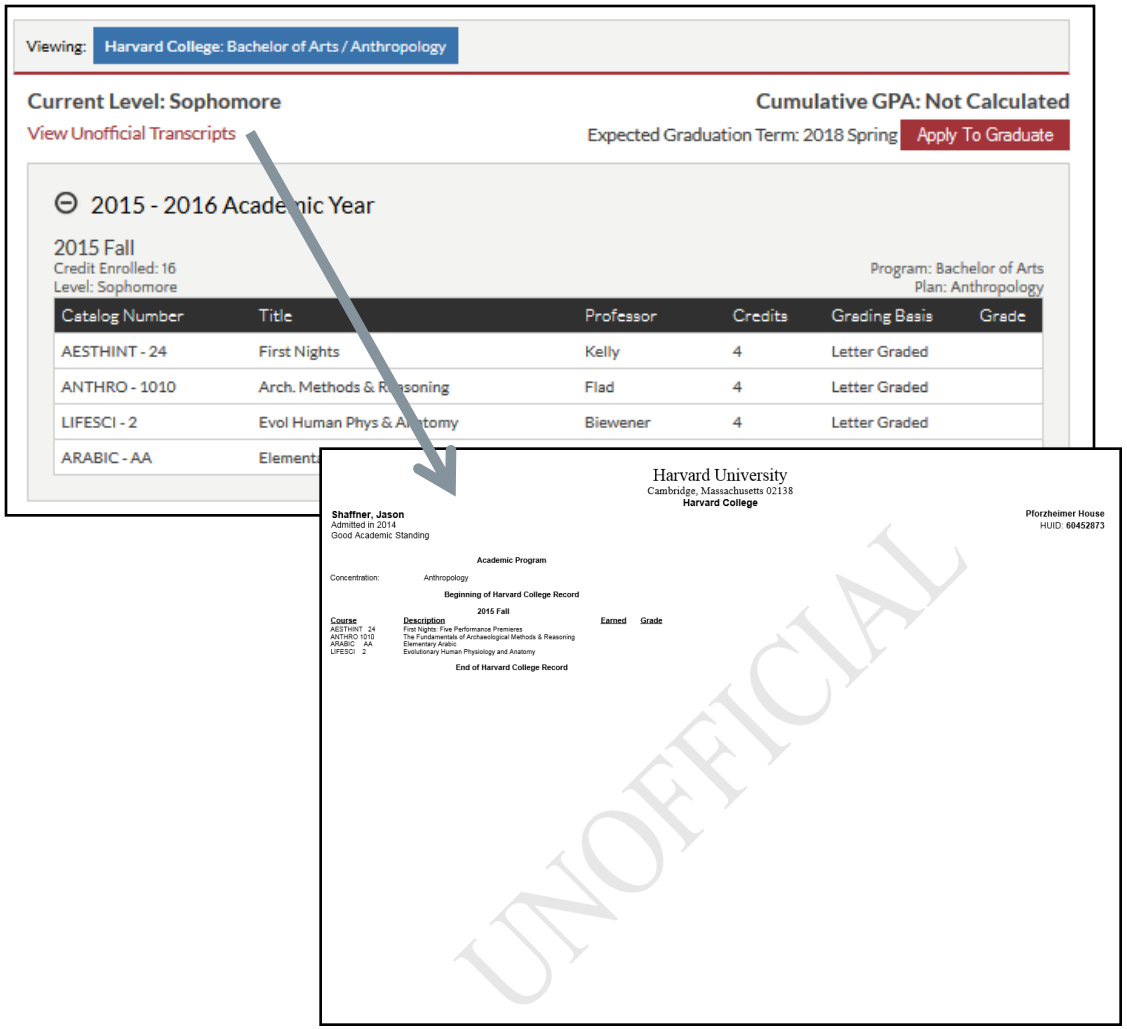
Requirements

View:

Category	Milestone		Status	Complete Date	Typical G-Year
Exam(s)	Generals		Incomplete		3
Paper(s)	Prospectus		Incomplete		3
Language(s)	German	Show Comment	Incomplete		2
Language(s)	Latin	Show Comment	Incomplete		2
Language(s)	French	Show Comment	Complete		2
Coursework	Seminar 1	Show Comment	Complete		1
Coursework	Additional History Course 2	Show Comment	Complete		1
Coursework	Additional History Course 4		Incomplete		1
Coursework	Elective 1	Show Comment	Complete		1
Coursework	Seminar 2	Show Comment	Incomplete		1
Coursework	Additional History Course 3	Show Comment	Complete		1
Coursework	Elective 2	Show Comment	Complete		1

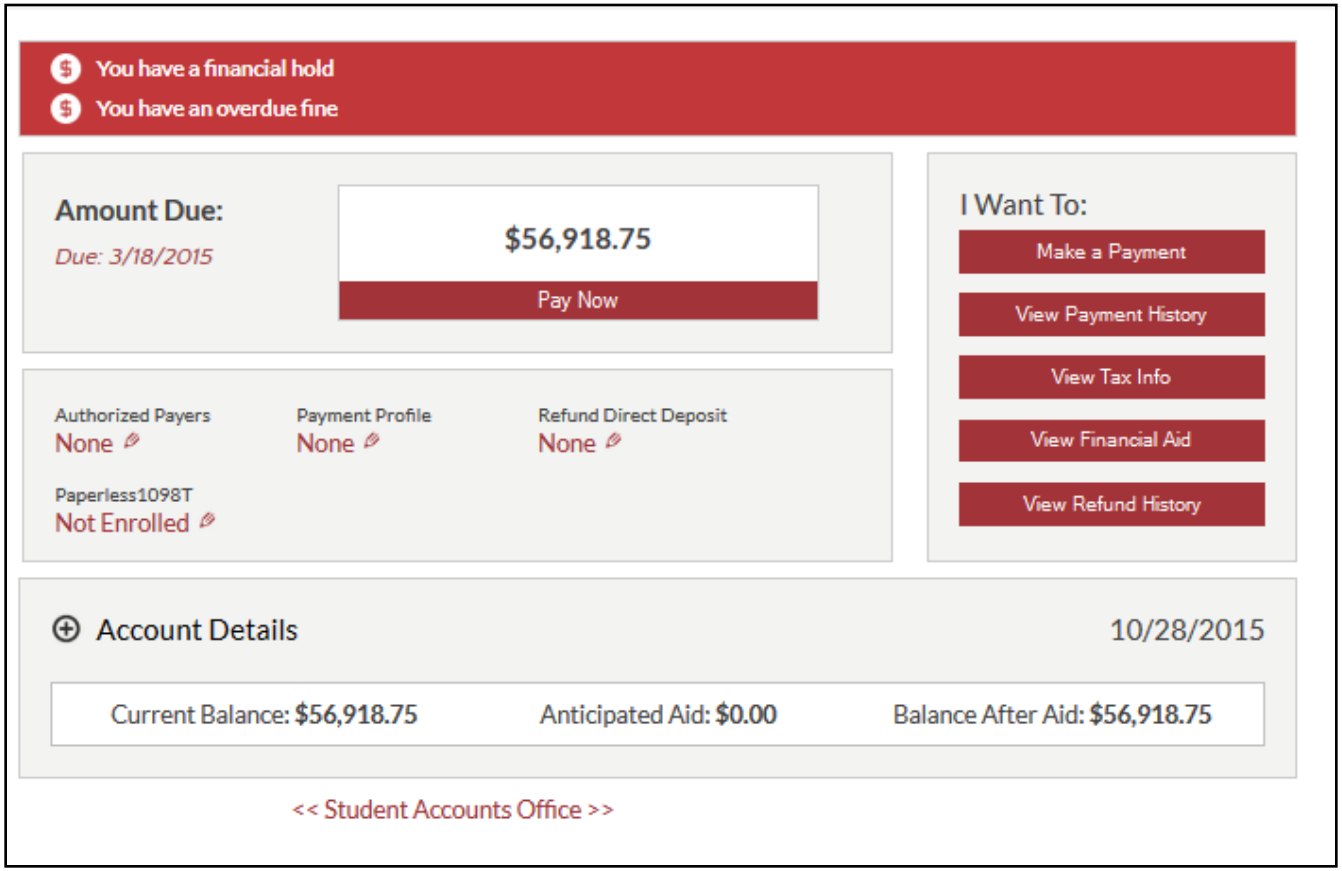
Grades

- This page displays grade history, with a toggle at the top of the page for each career.
- Transactions:
  - View Unofficial Transcript
  - Initiate Apply to Graduate
- Cumulative GPA does not appear for many professional school students



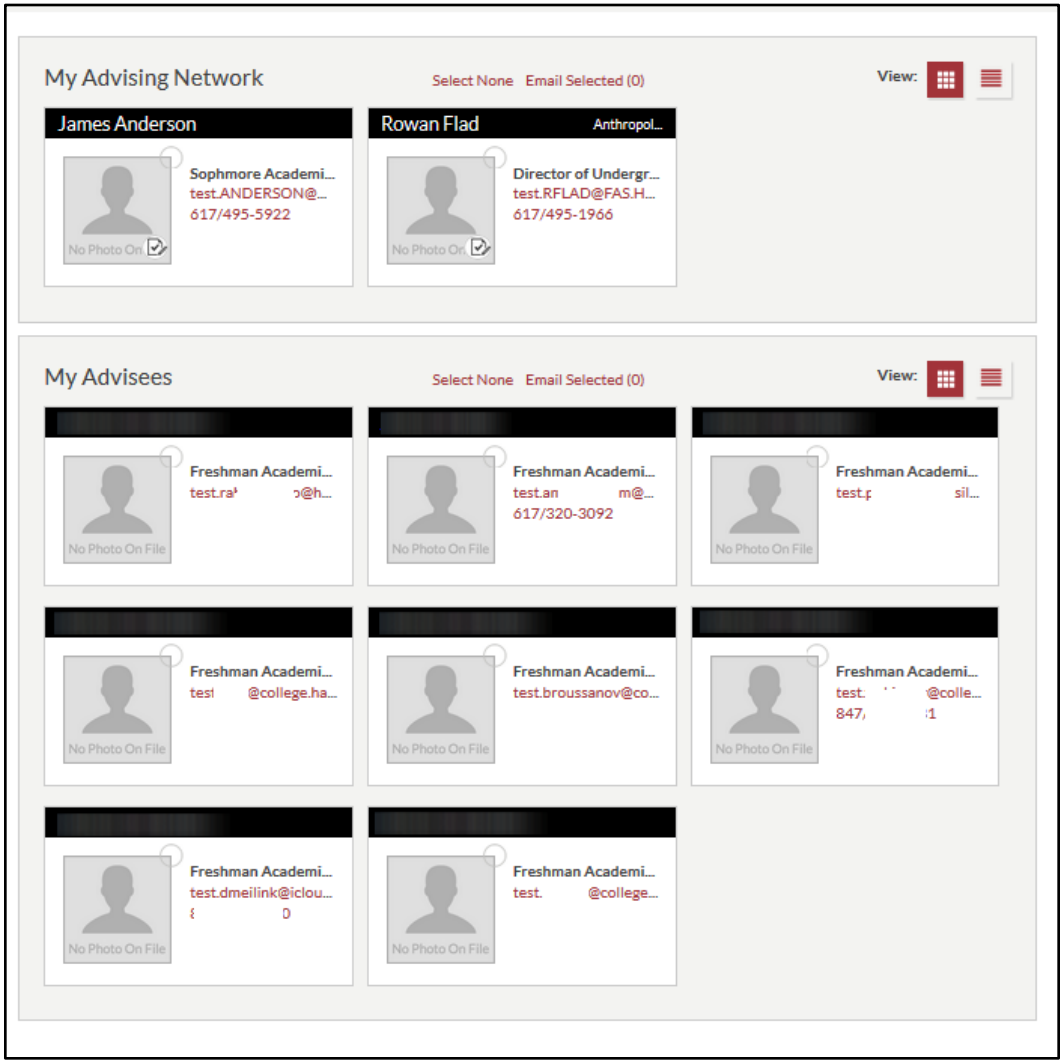
Financial Services

- Rolled out in January to support paperless 1098T
- Online payment (ACH only) to be released in June



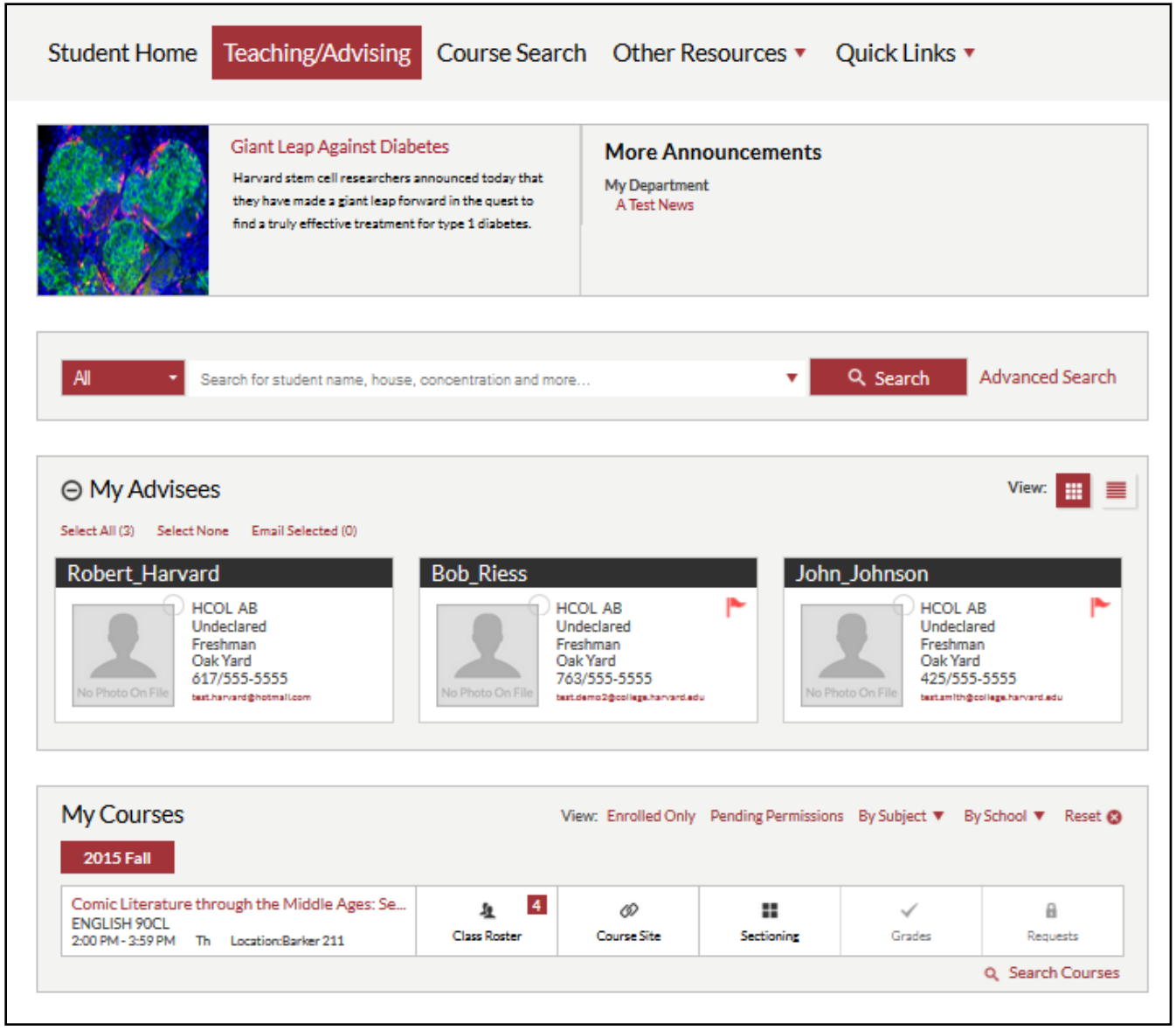
Advising

- This page displays what we call the “advising network” – all the people who are advisors for the logged in student, PLUS any students for whom the student is an advisor.
- At this time, the only actions to be taken here are to initiate email or phone call
- Although many students will not have any advisees, there are quite a few across schools who serve as tutors in undergraduate houses and there is a peer advising system in the College.

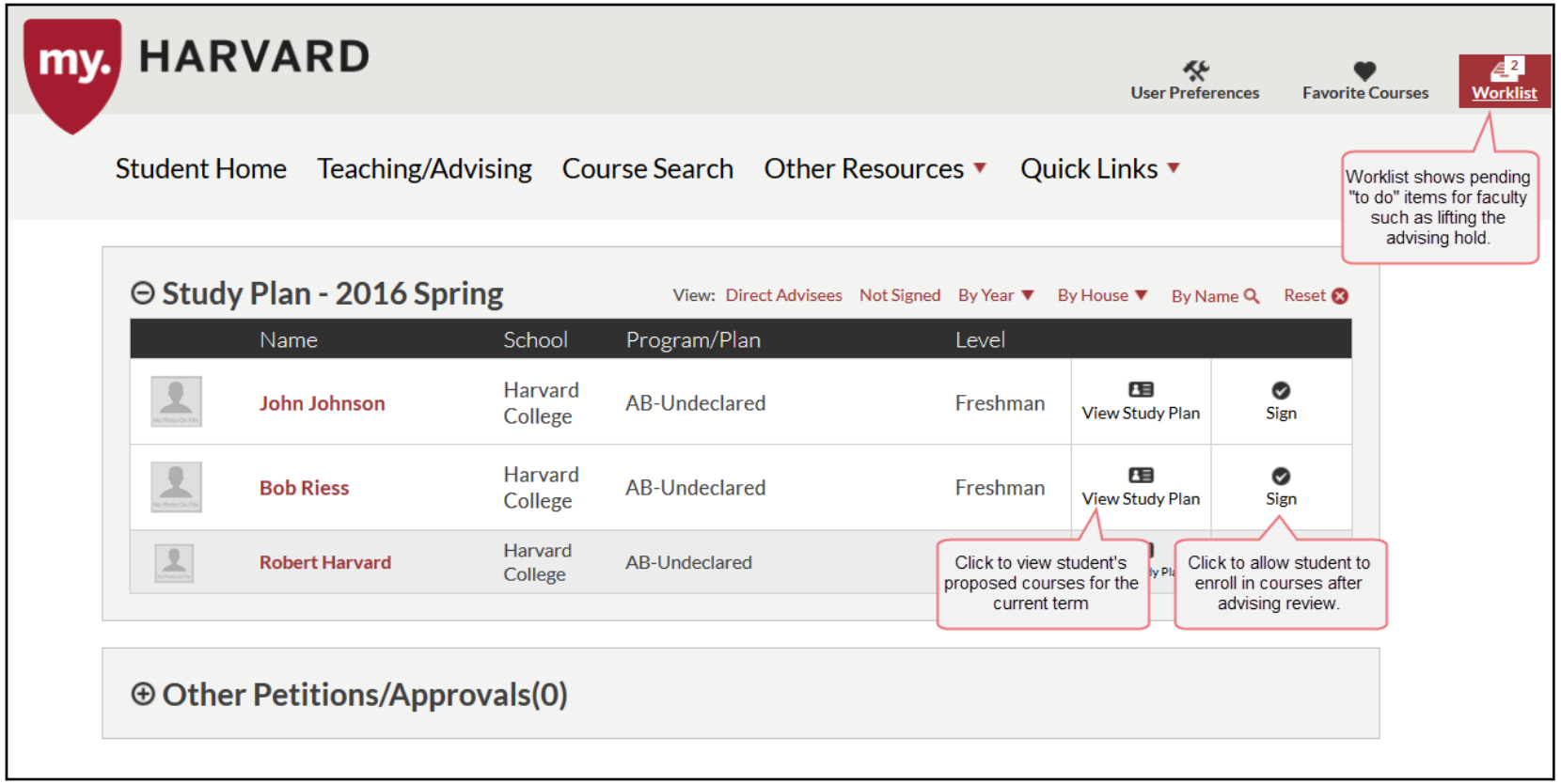


Appendix: Advisor/Faculty Screenshots

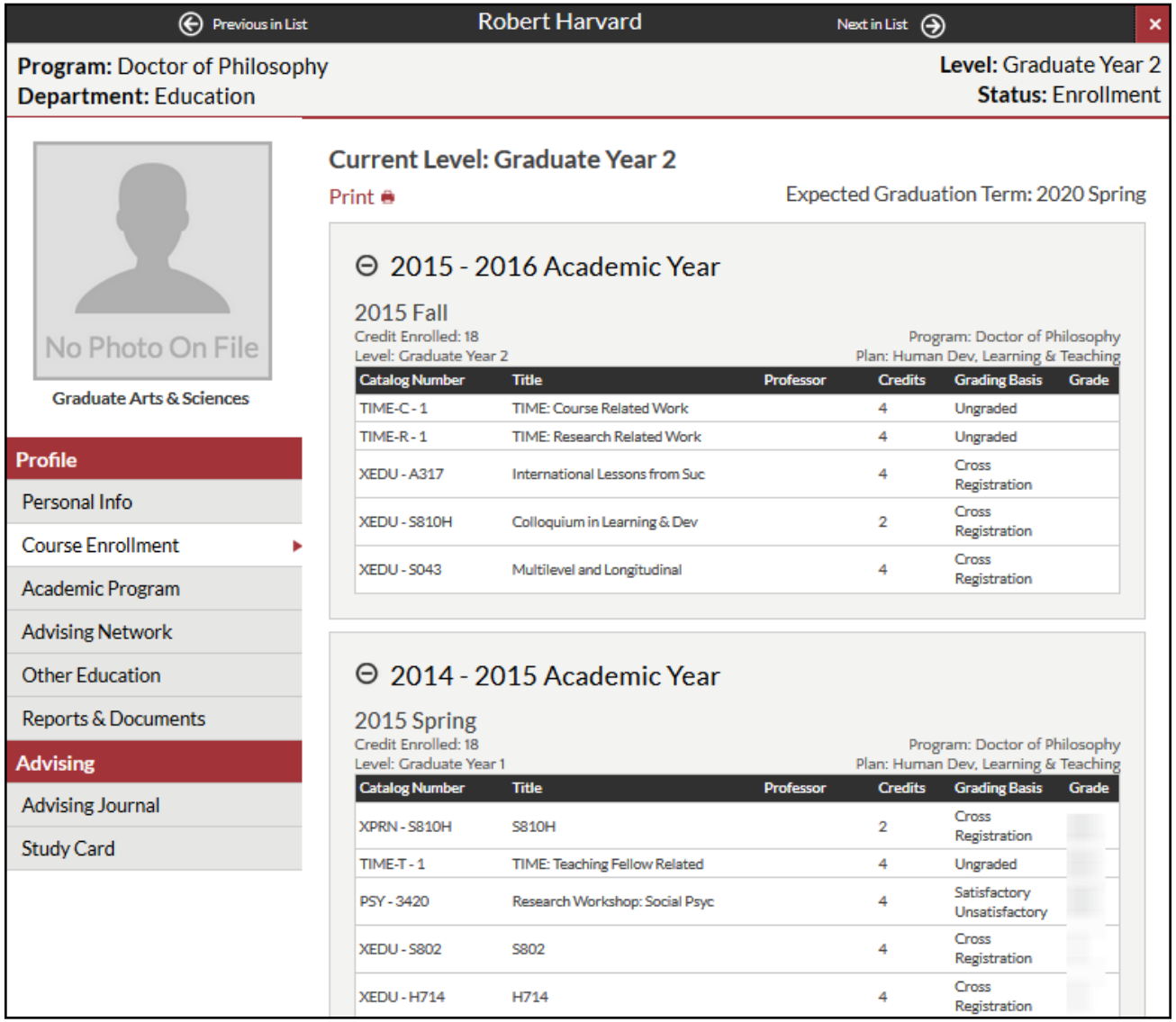
Consolidated Teaching/Advising Center



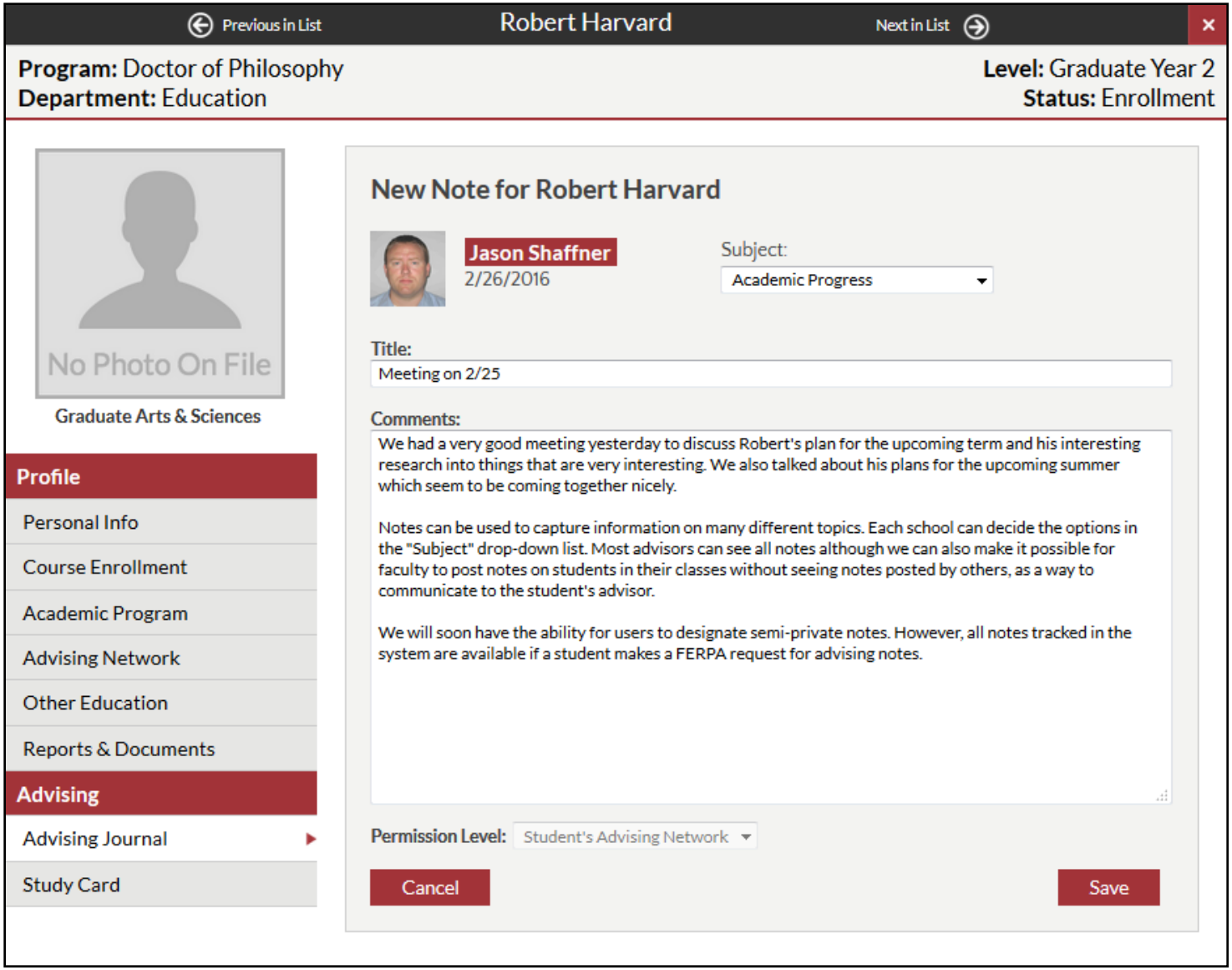
Review and approve advisee study plans



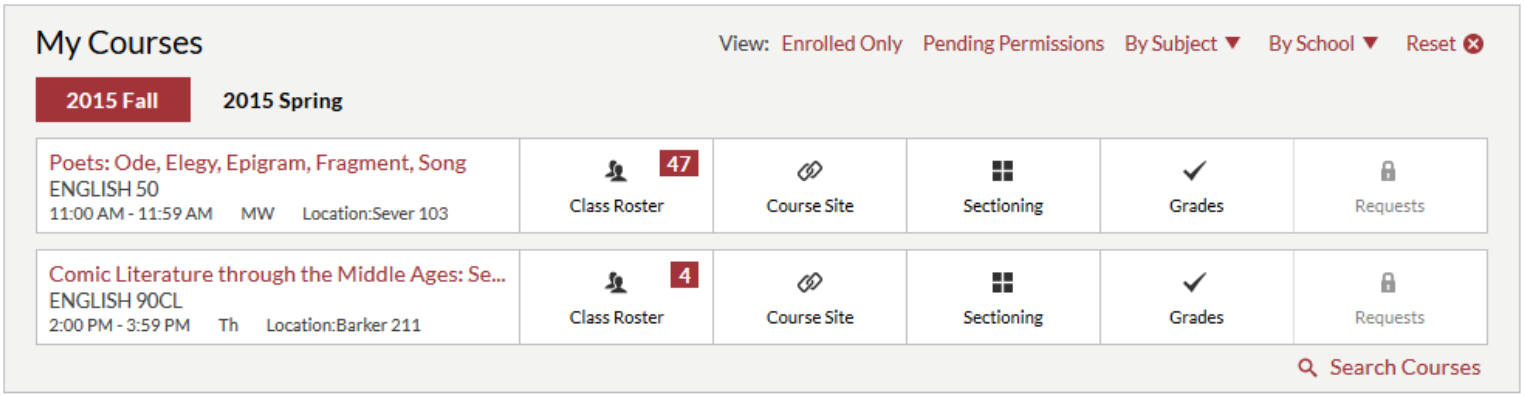
View current, previous, and prospective advisee records



Track notes from advising conversations



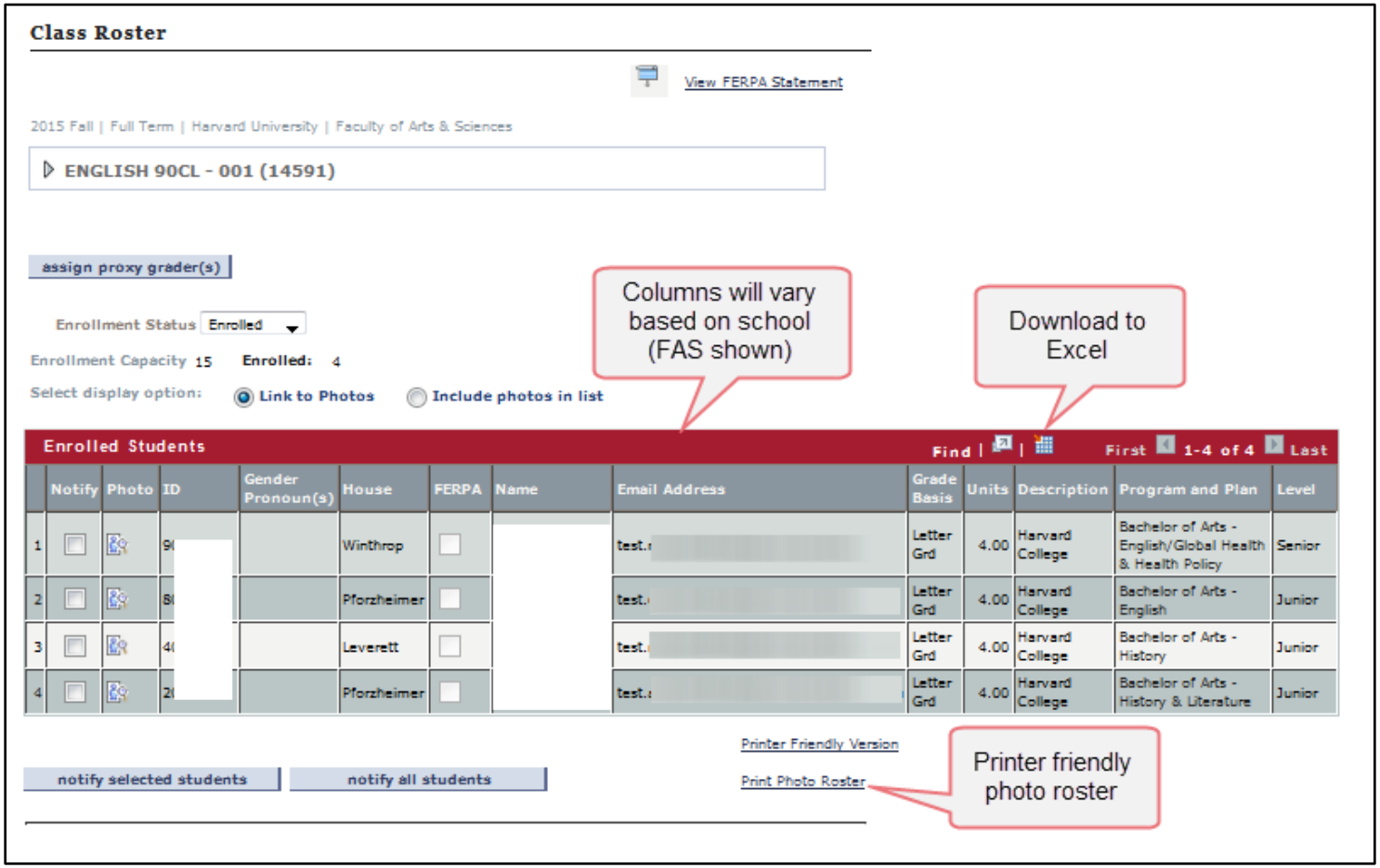
My Courses Overview



- **Filters** – Quickly filter only courses with enrollments, pending requests, etc. Defaults to the current term but will be able to choose previous terms.
- **Class Roster** – Open Class Roster; displays count of current enrollment.
- **Course Site** – Launches Canvas website.
- **Sectioning** – Currently enabled only for FAS courses; allows faculty or teaching staff to divide students into discussion sections.
- **Grades** – Access online grade roster, allowing manual or spreadsheet upload.
- **Requests** – Approve/deny permission requests; displays # in queue.

Course Roster Preview

Schools can decide data elements shown by default; includes ability to show photos, download to Excel, print "facebook," etc.



Grade Roster Preview

Multiple options to enter final grades online and we are evaluating options for direct integration with Canvas gradebook.

